



**Tri-Service CADD/GIS
Technology Center**

A Survey of Tri-Service Environmental Restoration and Compliance Initiatives Using Computer-Aided Design and Drafting (CADD)/Geographic Information System (GIS) Technology

by Bobby Carpenter, WES

Steven C. Gonzales, Brian Shin, NAVFAC

*Tri-Service CADD/GIS Technology Center
Environmental Field Working Group*

Approved For Public Release; Distribution Is Unlimited

19971030 011

THIS DOCUMENT IS UNCLASSIFIED

Waterways Experiment Station Cataloging-in-Publication Data

Carpenter, Bobby G.

A survey of Tri-Service environmental restoration and compliance initiatives using Computer-Aided Design and Drafting (CADD)/Geographic Information System (GIS) technology / by Bobby Carpenter, Steven C. Gonzales, Brian Shin.

126 p. : ill. ; 28 cm. -- (Technical report ; CADD-97-1)

1. Environmental auditing -- Computer programs. 2. Environmental impact analysis -- Computer programs. I. Gonzales, Steven C. II. Shin, Brian. III. United States. Army. Corps of Engineers. IV. U.S. Army Engineer Waterways Experiment Station. V. Tri-Service CADD/GIS Technology Center (U.S.) VI. Title. VII. Series: Technical report (U.S. Army Engineer Waterways Experiment Station) ; CADD-97-1.

TA7 W34 no.CADD-97-1

A Survey of Tri-Service Environmental Restoration and Compliance Initiatives Using Computer-Aided Design and Drafting (CADD)/Geographic Information System (GIS) Technology

by Bobby Carpenter

U.S. Army Corps of Engineers
Waterways Experiment Station
3909 Halls Ferry Road
Vicksburg, MS 39180-6199

Steven C. Gonzales, Brian Shin

NAVFACENGCOM HQ
200 Stovall Street
Code 42, Environmental
Alexandria, VA 22332-2300

Tri-Service CADD/GIS Technology Center
Environmental Field Working Group

Final report

Approved for public release; distribution is unlimited

DTIC QUALITY INSPECTED 3

Waterways Experiment Station Cataloging-in-Publication Data

Carpenter, Bobby G.

A survey of Tri-Service environmental restoration and compliance initiatives using Computer-Aided Design and Drafting (CADD)/Geographic Information System (GIS) technology / by Bobby Carpenter, Steven C. Gonzales, Brian Shin.

126 p. : ill. ; 28 cm. -- (Technical report ; CADD-97-1)

1. Environmental auditing -- Computer programs. 2. Environmental impact analysis -- Computer programs. I. Gonzales, Steven C. II. Shin, Brian. III. United States. Army. Corps of Engineers. IV. U.S. Army Engineer Waterways Experiment Station. V. Tri-Service CADD/GIS Technology Center (U.S.) VI. Title. VII. Series: Technical report (U.S. Army Engineer Waterways Experiment Station) ; CADD-97-1.

TA7 W34 no.CADD-97-1

Contents

Preface	iv	3—Findings	16
1—Introduction	1	ER/EC Points-of-Contact	16
Purpose	1	ER/EC CADD/GIS Initiatives	16
Applicability	1	Use of CADD/GIS Technology in	
Availability	1	Accomplishing Environmental	
Background	1	Restoration/Compliance Activities	17
Environmental Restoration and		Available Electronic Information	
Environmental Compliance	2	and Data	18
Environmental Restoration/Compliance		Appendix A: Information Sheet and Survey	
CADD/GIS Initiatives	2	Questionnaire Form	A1
Report Development Process	3	Appendix B: Points-of-Contact -	
Comprehensiveness	4	Alphabetical Listing by Name	B1
2—Internet Sources of Environmental		Appendix C: Points-of-Contact -	
Restoration/Compliance Data		Alphabetical Listing by Installation/	
and Information	5	Office Name	C1
Environmental FWG Internet		Appendix D: Environmental	
Web Site	5	Restoration/Compliance	
Air Force Internet Web Sites	6	CADD/GIS Initiatives	D1
Army Internet Web Sites	6	Appendix E: Use of CADD/GIS	
Army Corps of Engineers Internet		Technology in Accomplishing	
Web Sites	6	Environmental Restoration/	
Navy Internet Web Sites	8	Compliance Activities	E1
Marines Internet Web Sites	9	Appendix F: Available Electronic	
Other DoD Internet Web Sites	9	Information and Data	F1
Environmental Protection Agency		SF298	
Internet Web Sites	9		
Other Federal Government			
Internet Web Sites	11		
Environmental Web Site Directories	12		
Universities and Institutions	12		
Subject Index of Web Sites	12		
Vendors	15		

Preface

The preparation of this report was funded through the Tri-Service CADD/GIS Technology Center (Tri-Service Center) located at the Information Technology Laboratory (ITL), U.S. Army Engineer Waterways Experiment Station (WES), in Vicksburg, MS. The report contains the results of a project accomplished by the Tri-Service Center's Environmental Field Working Group (FWG) during fiscal year 1996 (FY96) entitled "Identify and Review Environmental Restoration and Compliance Initiatives Using Computer-Aided Design and Drafting (CADD)/Geographic Information System (GIS) Technology."

The report was prepared under the direction of Dr. N. Radhakrishnan, Director, ITL, and Mr. John A. Hood III, PE, and Mr. Harold Smith, Acting Chiefs, Tri-Service Center. The Tri-Service Center functions under the guidance and direction of the Executive Steering Group (ESG) composed of Dr. Get Moy (Navy), present chairman of the group, Mr. Steven Stockton and Mr. Charlie Cheung (U.S. Army Corps of Engineers (USACE)), Mr. Mark Meranda (Army), and Mr. Gary Erickson (Air Force). The goals and objectives of the Tri-Service Center are reviewed and guided by the Executive Working Group (EWG), currently chaired by Mr. Don Ritenour (Air Force), and composed of Mr. Dana (Deke) Smith (Navy), Mr. Ron Hatwell (USACE), Col. William Pearson (Air Force),

Mr. M.K. Miles (USACE), Mr. Jim Carberry (Navy), Mr. Thomas Rutherford (Office, Secretary of Defense), Dr. N. Radhakrishnan (WES), Mr. Joseph LaVoie (Army), Mr. Jeff Huskey (Navy), Mr. Paul Herold (Coast Guard), and Mr. Peter J. Sabo (Army).

The members of the Tri-Service Center's Environmental FWG during FY96 included Mr. Christopher Kyburg (Southwest Division NAVFACENGCOM and FY96 chairman), Mr. Steven Gonzales (HQ NAVFACENGCOM), Mr. Sam Bass (USACE HTRW MCX), Mr. Mung Lun Yuen (HQ AFCEE), Mr. Phil Hunter (HQ AFCEE), Ms. Vicky Cwiernie (Aberdeen Proving Ground), Mr. Bill Lopp (HQ AETC), Mr. Larry Mann (USAE District, Seattle), Mr. Neil Fehr (USAE District, Kansas City), Mr. Thomas Stephan (Northern Division NAVFACENGCOM), Ms. Georgette Myers (Army Environmental Center), and Mr. Bobby Carpenter (Tri-Service Center.)

Authors of the various chapters and appendixes of the report include Mr. Brian Shin and Mr. Steven Gonzales, HQ NAVFACENGCOM, and Mr. Bobby Carpenter, Tri-Service Center.

During the publication of this report, Dr. Robert W. Whalin was the Director of WES.

The contents of this report are not to be used for advertising, publication, or promotional purposes. Citation of trade names does not constitute an official endorsement or approval of the use of such commercial products.

1 Introduction

Purpose

This report summarizes the findings of an effort accomplished by the Tri-Service Computer-Aided Design and Drafting (CADD)/Geographic Information System (GIS) Technology Center's (Tri-Service Center's) Environmental Field Working Group (FWG) during fiscal year 1996 (FY96) to identify and review Environmental Restoration (ER) and Environmental Compliance (EC) initiatives using CADD and/or GIS technology. The purpose of this effort was two-fold: (1) minimize duplication of effort, encourage communication, and facilitate transfer of available information and knowledge concerning ER and EC activities between the various Department of Defense (DoD) organizations; and (2) determine the extent that CADD, GIS, and other computerized technology are used for accomplishing ER and EC activities, determine training needs, and determine methods for facilitating greater usage of this technology in the future.

Applicability

The findings of this report are applicable to all DoD and Government project management, design, and technical personnel involved in the accomplishment or management of ER or EC activities.

Availability

Requests for additional copies of this report should be sent to the Tri-Service CADD/GIS Technology Center (CEWES-ID-C) ATTN: Mr. Bobby Carpenter, U.S. Army Engineer Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, MS 39180-6199 (telephone no. (601) 634-4572) (FAX No. (601) 634-4584) (E-mail: carpenb@ex1.wes.army.mil).

An electronic copy of the information contained in the report may also be obtained from the Tri-Service CADD/GIS Technology Center's Internet Homepage at Uniform Resource Locator (URL) address - <http://mr2.wes.army.mil> (go to Environmental FWG).

Background

In 1992, the Tri-Service CADD/ GIS Technology Center (Tri-Service Center) was established at the U.S. Army Engineer Waterways Experiment Station (WES) in Vicksburg, MS. The mission of the Tri-Service Center is to function as a coordination center that relies on the capabilities throughout the DoD to accomplish specific tasks and develop applications related to CADD/GIS technology. The functions of the Tri-Service Center are to provide limited applications

development, promote communications, develop standards, provide technical consultations, provide a technical role in acquisitions, interface with professional organizations and industry, evaluate technological developments, and recommend necessary CADD/GIS policy. The Tri-Service Center has been specifically tasked to consolidate and promote the use of CADD and GIS standards within the tri-service community.

During FY96 the Tri-Service Center's Environmental FWG undertook an effort to identify and review ER and EC initiatives and to communicate with other agencies and organizations involved with such activities. The effort focused on identifying (1) ER and EC initiatives involving CADD and/or GIS technology, (2) points-of-contact (POCs) for ER/EC activities, and (3) sources of digital information and data concerning ER/EC activities. The agencies and organizations of concern included the DoD; Environmental Protection Agency (EPA); and other branches of the federal, state, and local government; research institutions; and universities.

Environmental Restoration and Environmental Compliance

For the purpose of this report the term *Environmental Restoration* (ER) refers to activities such as site assessments; site investigations; studies; feasibility studies; remedial designs; remedial actions; treatment, reduction, or removal concerning hazardous, toxic, and radioactive waste (HTRW), ordnance and explosive waste (OEW), chemical warfare materials, and biological warfare materials in the air, soil, sediment, groundwater, and/or surface water which are, or have the potential to be, detrimental to life and ecosystems on earth. Other terms used include environmental remediation and environmental cleanup. ER includes activities associated with the Installation Restoration Program (IRP), Defense Environmental Restoration Program at Formerly Used Defense Sites (DERP-FUDS), and Superfund.

For the purpose of this report the term *Environmental Compliance* (EC) refers to activities such as the management of chemicals and hazardous materials and wastes, processes, and activities in such a manner to comply with federal, state, and/or local environmental laws and regulations. Also included are studies and abatement activities involving buildings with environmental hazards (e.g., asbestos, lead, radon, PCBs, etc.), and the management of fuel and chemical storage tanks and appurtenances, and hazardous materials and hazardous waste.

Environmental Restoration/ Compliance CADD/GIS Initiatives

This study focused on past, current, and/or future ER/EC initiatives, which for the purpose of this effort consisted of four areas of main concern:

- a. ER/EC programs and projects which made/make use of CADD and/ or GIS technology.
- b. Sources of the essential information and requirements (in electronic format) for ER/EC activities (e.g., federal, state, and/or local regulations; state, local, and federal regulator-accepted cleanup criteria and concentrations; background concentration data; risk assessment criteria and data; material safety data sheets (MSDS); applicable or relevant and appropriate requirements (ARARs); lessons learned; CADD details; standard operating procedures (SOPs); historic and current air, soil, groundwater, surface water, and sediment environmental quality data; historic and current aerial photographs and maps; boring and well logs, development data, and monitoring data; etc.) The sources of information may be available either through Internet web pages, electronic bulletin boards; or an office which disseminates the information.

- c. Database schemata and programs designed to manage data and facilitate the accomplishment of an environmental restoration and/or environmental compliance activities.
- d. Computer programs which perform analysis, management, modeling, or other functions relating to ER/EC activities.

Report Development Process

Research

The research, interviews, and basic preparation of this report were accomplished either directly by, or under the guidance of, the Tri-Service Center's Environmental FWG.

The basic research for the project was accomplished by a combination of telephone interviews, mailout questionnaires, a "downloadable" digital questionnaire on the Tri-Service Center's Internet Home Page, and a review of available ER/EC information and data sites on the Internet. A copy of the questionnaire and instructions are included in Appendix A.

Additional research focusing specifically on DoD project managers and contractors involved with implementing Release 1.4 of the Tri-Service Spatial Data Standards (TSSDS) was accomplished by Baker Environmental, Inc.; Airport Office Park, Building 3; 420 Rouser Road; Coraopolis, Pennsylvania 15108 through Delivery Order No. 7 of Contract No. DACA39-96-D-005.

Focus Areas

The project focused on gathering information in the following categories:

(1) Name, address, phone number, accessibility to Internet, etc. information concerning POCs for ER/EC activities.

(2) Internet Web Site or Bulletin Board Service (BBS) sources of ER/ EC data and information provided by tri-service and other organizations.

(3) Categories and types of ER/EC work performed by each organization.

(4) Types of ER/EC and related electronic information and data available to other organizations.

(5) Extent that CADD and GIS technology is used to perform ER/EC activities, and the types of software used.

(6) Initiatives involving the use of CADD/ GIS technology to perform ER/ EC activities.

(7) Optional input concerning experience in using CADD/GIS for ER/EC type work, and recommendations on types of CADD/GIS training to offer.

ER/EC Database

The information compiled during the research process was stored in an Access (Microsoft, Inc.) database (called the ER/EC Database) for management and report generation. A detailed discussion of the ER/EC Database and the reports generated from it are included in Chapter 3. The database will be updated on a periodic basis as new information becomes available.

Internet Web Site

The Tri-Service Center established an Internet Web Site in FY96 for each of its Field Working Groups to use in sharing information regarding their activities and the use of CADD and GIS technology. The information gathered from this project is available for download from the Environmental FWG Web Site at URL address:

<http://fwgcom.wes.army.mil/fwg/enviro/viron.htm>. The Environmental FWG Internet Web Site can also be accessed by following the "Center Working Groups" link on the Tri-Service CADD/GIS Technology Center's Internet Home Page at URL address: <http://tsc.wes.army.mil> to the "Environmental Field Working Group."

one-year effort in identifying ER/EC POCs and Environmental Restoration/ Compliance CADD/GIS initiatives. The accuracy and comprehensiveness of the information depends on the identification of the appropriate POCs for the Initiatives Survey, and their responsiveness to the telephone interviews and completion of the Initiatives Survey Forms.

Comprehensiveness

The information gathered as a result of this study and included in this report is the result of a

2 Internet Sources of ER/EC Data and Information

Numerous Internet sources of ER/EC and related data and information have been identified. Links to these web sites have been added to the Environmental FWG Internet Web Site. The links will be updated as more Internet web sites are identified and become available. The URL addresses for web sites not currently included on the Environmental FWG's Internet Web Site should be sent to Mr. Bobby Carpenter, Tri-Service CADD/GIS Technology Center, at phone number 601-634-4572, fax number 601-634-4584, or E-mail address: carpenb@ex1.wes.army.mil. The identified Internet sources of data and information, with descriptions and URL addresses, are summarized below.

Environmental FWG Internet Web Site

The Tri-Service Center has established an Internet web site for use by the Tri-Service Center's Environmental FWG at URL address: <http://fwgcom.wes.army.mil/fwg/environ/environ.htm> to provide:

- (1) The exchange of information regarding the activities of the Tri-Service Center's Environmental FWG.
- (2) The exchange of data and information concerning the use of CADD and GIS technology

in accomplishing environmental restoration and compliance activities within the tri-services.

- (3) Links to other Internet sources of environmental restoration and compliance data and information.
- (4) Information and products developed at the Tri-Service Center.

The Environmental FWG Internet Web Site has been organized into the following general categories. The web page will be reorganized and updated by the Tri-Service Center as the need arises.

- (1) Environmental FWG membership and purpose information.
- (2) Links to other Internet sources of ER/EC data and information.
- (3) Documents and files (e.g., meeting minutes, papers, presentations, etc.)
- (4) ER/EC CADD/GIS initiatives and activities information.
- (5) Link to the Tri-Service Web Site containing downloadable environmental hazards, HTRW, and other CADD details and symbols.
- (6) Link to the Tri-Service Center Home Page.

Air Force Internet Web Sites

Air Force Center of Environmental Excellence (AFCEE) - Home Page for AFCEE which provides access to the Air Force Installation Restoration Program Information Management System (IRPIMS) software - <http://www.afcee.brooks.af.mil/index.html>

Pro-Act - Web Site sponsored by AFCEE designed to distribute environmental information to Air Force personnel and civilian employees - http://www.afcee.brooks.af.mil/pro_act/main/proact4.htm

Kelly AFB - Home Page for the Kelly AFB Environmental Management Office - <http://www.kelly.afb.org/links/pub/environ/environ.htm>

Hill AFB - Home Page for the Hill AFB Environment, Safety, and Occupational Health Branch - <http://esoh-www.hill.af.mil/>

Air Force - Web Site with links to other Air Force Web Sites - <http://www.dtic.dla.mil/airforcelink/>

Army Internet Web Sites

Army Acquisition Pollution Prevention Support Office - Contains pollution prevention information such as substitutions for ozone depleting chemicals - <http://www.aappso.com/>

Army Environmental Center - Home Page for the Army Environmental Center (AEC), whose mission includes centralized management, oversight, coordination, and execution of Army's environmental programs - <http://aec-www.apgea.army.mil:8080/>

Environmental Training Support Center - Home Page for the Army Environmental Training Support Center (ETSC), which provides environmental training for Army personnel and its

civilian employees - <http://www.hnd.usace.army.mil/etsc/>

Army Environmental Policy Institute - Home Page for the Army Environmental Policy Institute (AEPI), which helps the Army's Secretariat develop policies and strategies to address environmental issues - <http://aepi.gatech.edu/>

U.S. Army Materiel Command - Home Page for the Army Materiel Command Environmental Compliance Division - <http://www.ria.army.mil/isa/environ.htm>

Rocky Mountain Arsenal - Web Page developed to educate and inform about cleanup efforts at the Rocky Mountain Arsenal - <http://pmrma-www.army.mil/>

Army - Web Page with links to other Army Web Sites - <http://www.army.mil/>

Army Corps of Engineers Internet Web Sites

USACE Environmental Programs - Home Page for information concerning U.S. Army Corps of Engineers Environmental Programs - <http://www.usace.mil/env.html>

New England Division - Home Page for the New England Division Environmental Branch - <http://www.ned.usace.army.mil/environm/environm.htm>

Baltimore District - Web Page with information about Baltimore District Environmental Projects - <http://www.nab.usace.army.mil/nab/environmental/>

North Central Division - Home Page for the North Central Division with leads to Environmental Program Management Web Page and an Environmental Calendar - <http://www.usace.army.mil/ncd/>

Sacramento District - Home Page for Sacramento District with information regarding regulatory issue of wetlands - <http://wetland.usace.mil>

Seattle District - Home Page for Seattle District which leads into a HTRW Page. - <http://www.nps.usace.army.mil/>

Walla Walla District - Home Page for Walla Walla District Environmental Resources Branch - <http://www.npw.usace.army.mil/html/offices/pl/er/plerpage.htm>

Savannah District - Home Page for Savannah District Geotechnical and HTRW Branch - <http://www.usace.army.mil/sas/en/en-g/main.htm>

WES Environmental Lab - Home Page for the Waterways Experiment Station Environmental Laboratory - <http://www.wes.army.mil/el/homepage.html>

WES Hydraulics Laboratory - Home Page for the Waterways Experiment Station Hydraulics Laboratory, which contains the Groundwater Modeling System (GMS) and other modeling software - <http://hlnet.wes.army.mil/>

WES Geotechnical Laboratory - Home Page for the Waterways Experiment Station Geotechnical Laboratory - <http://www.wes.army.mil/GL/SMIAC/smiac.html>

Environmental Project Information Retrieval System - Home Page for USACE Environmental Project Information Retrieval System (PIRS) - <http://dogbert.ncr.usace.army.mil/>

Huntsville Division - Home Page for Huntsville Division with access to USACE Ordnance and Explosives Mandatory Center of Expertise (MCX) - <http://www.hnd.usace.army.mil/>

Ordnance & Explosives Engineering Support - Web Page with information concerning Ordnance & Explosives MCX - <http://dogbert.ncr.usace.army.mil/oeteam/oe.htm>

USACE HTRW MCX - USACE HTRW Center of Expertise - <http://www.mrd.usace.army.mil/mrded-h/mrded-h.html>

Kansas City District - Home Page for the Kansas City District. Contains capabilities of offices within the District, including SCAPS capability of the Geology Section - <http://www.mrk-wc.usace.army.mil/>

Mobile District Hazardous & Environment Support - Home Page of the Mobile District Hazardous & Environment Support Office - <http://www.sam.usace.army.mil/sam/en/en.htm>

Portland District - Home Page for the Portland District with information concerning environmental programs - <http://www.npp.usace.army.mil/>

Fort Worth District - Home Page of the Fort Worth District - <http://www.ed1.swf.usace.army.mil/>

Mobile District GIS, Survey, & Photogrammetry Section - <http://www.sam.usace.army.mil/sam/en/enms/enms.htm>

Baltimore District - Home Page of the Baltimore District with information on environmental projects - <http://www.nab.usace.army.mil/nab/>

Contaminated Site Database - Web Site with access to Database of U.S Army, Europe Contaminated Sites (DUCS) - <http://www.cecer.army.mil/facts/sheets/PL27.html>

CERL - Home Page for the U.S. Army Corps of Engineers Construction Engineering Research Laboratory - <http://www.cecer.army.mil/>

River Engineering and Environmental Graphical Information System (REEGIS) - A geospatial database for the Mississippi River and its tributaries in the Lower Mississippi Valley Division - <http://www.lmv.usace.army.mil/homepage/reegis/reegis.html>

Navy Internet Web Sites

NAVFAC Environmental Services - Web Site with information on environmental programs, documents, and a directory at the Facilities Environmental Division of the Navy - <http://www.ncts.navy.mil/homepages/navfac/env/index.html>

Southwest Division NAVFAC Environmental - Home Page for the Southwest Division Naval Facilities Engineering Command Environmental Department - <http://ivory.nosc.mil/~saundel/default.html>

EFD Southwest Environmental - Home Page for the Environmental Department of EFD Southwest - <http://www.fdsouthwest.navy.mil/DEP/ENV/18.htm>

EFD Northern Environmental Newsletter - News clippings of environmental projects at Northern Division - http://www.efdnorth.navy.mil/html_1.htm

EFD Southern Environmental - Home Page for Southern Division's Environmental Department - http://www.navy.mil/homepages/navfac_southdiv/code18.htm

Naval Facilities Engineering Service Center Environmental - Home Page for the Naval Facilities Engineering Service Center Environmental Office. - <http://www.nfesc.navy.mil/>

CNO Environmental - Home Page for the Chief of Naval Operations - <http://n4.nosc.mil/enviro.html>

Navy CFC & Halon Clearinghouse - Provides information, data, and expertise on Navy policy, EPA regulations, and alternative chemicals, processes, and equipment - <http://home.navisoft.com/navyozone/index.htm>

Puget Sound Naval Shipyard Environmental - Summarizes the efforts underway at Puget Sound Naval Shipyard - http://www.navy.mil/homepages/navfac_es/psns/index.htm

Naval District Washington - Environmental and Safety Programs Home Page - <http://www.ndw.navy.mil/dept/enviro/default.html>

Explosive Ordnance Disposal Mobile Unit Two - Home Page for the Explosive Ordnance Disposal Mobile Unit Two, Norfolk, VA - <http://www.norfolk.navy.mil/eod/>

Navy's Energy Website - Web Site to provide the Navy with guidance on ways to reduce utility cost and energy consumption - <http://energy.navy.mil>

NavyOnLine - Web Site with links to U.S. Navy Web Sites - <http://www.navy.mil>

Assistant Secretary of the Navy (ASN) Environmental - Web Site providing the Navy's policies, procedures, and mission statements regarding conservation, compliance, cleanup, pollution prevention, technology, planning, and safety and occupational health. Also provides links to related Web Sites - <http://www.enviro.navy.mil/>

CNO Environmental Protection, Safety, & Occupational Health - Chief of Naval Operations (CNO) Environmental Safety & Health Division (N45) Web Site providing mission statement, directory, and Navy environmental documents for CNO(N45). Also provides information on environmental conferences and additional Web Site links - <http://n4.nosc.mil/n45.html>

Navy BRAC Program - Web Site with information concerning the Navy's Base Relocation and Closure (BRAC) Program - <http://n4.nosc.mil/NavyBrac.html>

Deputy Chief of Naval Operation Logistics - Home Page for the Deputy Chief of Naval Operation Logistics (N4) - <http://n4.nosc.mil/n4.html>

Marines Internet Web Sites

USMC Environmental Awareness Guide - A guide for the Marine Corps on environmental

issues - <http://www.hqmc.usmc.mil/raw/enviro/guide/guide.htm>

Marine Corps - Home Page of the U.S. Marine Corps which provides information about the Marines plus links to Marine Corps Web Sites - <http://www.usmc.mil/>

Other DoD Internet Web Sites

DENIX - Defense Environmental Network and Information Exchange (DENIX) which is designed to provide DoD personnel with access to environmental legislative, compliance, restoration, cleanup, safety and occupational health, security, and other DoD guidance and information - <http://osiris.cso.uiuc.edu/denix/denix.html/>

DUSD (ES) - Home Page of Office of the Deputy Under Secretary for Environmental Security (DUSD (ES))- <http://osiris.cso.uiuc.edu/denix/env-sec.html>

DoD Environmental Restoration Small Business Link - Web Site designed to provide one-stop shopping for all small and minority businesses who are interested in supporting the DoD environmental cleanup mission - <http://www.dtic.dla.mil/envirodod/envirodod.html>

Defense Supply Center Hazardous Technical Information Services - Web Page designed to assist the DoD community with a Helpline Answer Service as well as with a Technical Bulletin concerning the compliant management of hazardous materials and wastes - <http://www.dscr.dla.mil/htis/htis.htm>

SERDP - Strategic Environmental Research and Development Program (SERDP), which is a multi-agency council of the DoD, EPA, and DOE formed to improve greater exchange of and access to environmental information - <http://prop.wes.army.mil/serdp/home.html>

DefenseLINK - Web Site with links to Web Sites related to the DoD - <http://www.dtic.dla.mil/defenselink/>

Environmental Protection Agency Internet Web Sites

Environmental Protection Agency - Home Page of the U.S. Environmental Protection Agency (EPA) - <http://www.epa.gov/>

EPA Regions - Home Page for the EPA Region Offices - <http://www.epa.gov/epahome/Regions.html>

Enviro\$en\$e - Web Site funded by the EPA to assist in the development of Pollution Prevention programs - <http://es.inel.gov/index.html/>

EPA Envirofacts - Home Page for EPA Envirofacts - http://www.epa.gov/enviro/html/ef_home.html

Clu-in - The Hazardous Waste Clean-Up Information Web Site providing information about innovative treatment technologies to the hazardous waste remediation community. It describes programs, organizations, publications, and other tools for federal and state personnel, consulting engineers, technology developers and vendors, remediation contractors, researchers, community groups, and individual citizens. The site was developed by EPA but is intended as a forum for all waste remediation stakeholders - <http://www.clu-in.com/>

EPA Municipal Solid Waste - Subtitle D - Web Site funded by EPA providing information on municipal solid waste - <http://www.epa.gov/OSWRCRA/non-hw/muncpl/>

Superfund - Web Site with information concerning the Superfund Program - <http://es.inel.gov/oeca/osre/osredoc.html>

Radiation - Web Site maintained by the Radiation Protection Division of the EPA Office of Radia-

tion and Indoor Air containing information about radiation - <http://www.epa.gov/radiation/>

Mixed Waste - Web Site maintained by the Radiation Protection Division of the EPA Office of Radiation and Indoor Air containing information about mixed waste - <http://www.epa.gov/radiation/mixed-waste/>

OPPT - Home Page of the EPA Office of Pollution Prevention and Toxics (OPPT) - <http://www.epa.gov/opptintr/>

Toxics Release Inventory (TRI) - EPA Web Site with information concerning the Toxics Release Inventory - <http://www.epa.gov/opptintr/tri/>

Chemicals on Reporting Rules (CORR) - EPA Web Site with information concerning Chemicals on Reporting Rules. Contains DBASE files which link TSCA chemicals to Federal Register notices - <http://www.epa.gov/docs/corr/>

OPPT Newsbreak - A daily news summary of environmental and cyberspace issues, produced by the EPA Office of Pollution Prevention and Toxics (OPPT) Library - http://www.epa.gov/opptintr/oppt_nb.txt

8(e) TRIAGE - A text retrieval program providing access to TSCA Section 8(e) information and reports - http://www.epa.gov/docs/8e_triag/

OPPT Chemical Fact Sheets - EPA Office of Pollution Prevention and Toxics (OPPT) Fact Sheets - <http://www.epa.gov/opptintr/chemfact/>

Chemicals in Environment - Web Site providing public access information concerning chemicals in the environment - <http://www.epa.gov/opptintr/cie/>

Chemical Testing and Information Gathering - Web Site providing information on OPPT chemical testing and information gathering - <http://www.epa.gov/opptintr/main/ctibhome.htm>

Cleaner Technologies for a Safer Future - Web Site maintained by OPPT providing information

concerning cleaner technologies for a safer future - <http://www.epa.gov/docs/dfe/>

Pollution Prevention Directory and News - OPPT Web Site providing a pollution prevention directory and news service - <http://www.epa.gov/opptintr/oppt2.htm>

Chemicals in Progress Bulletin - OPPT Web Site providing a bulletin on chemicals - <http://www.epa.gov/docs/ChemLibCIP/>

Market Product Data/SAR Report - OPPT Web Site providing a market product data and SAR report - <http://www.epa.gov/docs/MPD-SAR/>

New Chemicals Category Report - OPPT Web Site providing a new chemicals category report - <http://www.epa.gov/docs/chemcat/>

Screening Information Data Sheets (SIDS) - OPPT Web Site providing screening information Data Sheets - <http://www.epa.gov/opptintr/sids/>

VISITT - Web Site where the Vendor Information System for Innovative Treatment Technologies (VISITT) software can be downloaded - <http://www.prcemi.com:80/visitt/>

Other Federal Government Internet Web Sites

USGS - Home Page of the U.S. Geological Survey - <http://www.usgs.gov/>

NOAA - Home Page of the National Oceanic and Atmospheric Administration (NOAA) - <http://www.noaa.gov/>

NOAA Environment Information Services - Home Page for NOAA Environment Information Services - <http://www.esdim.noaa.gov/>

National Marine Fisheries Service (NMFS) - Home Page of the National Fisheries Service (NMFS) - <http://kingfish.ssp.nmfs.gov/>

Office of Science and Technology Policy - Home Page of the Whitehouse Office of Science and Technology Policy (OSTP) - <http://www.whitehouse.gov/OSTP.html>

Lawrence Berkely National Laboratory, Energy and Environment Division - Home Page of the Lawrence Berkely National Laboratory, Energy and Environmental Division - <http://eande.lbl.gov/EE.html>

Office Science and Technology Policy - OSTP Environment Division - Home Page of the OSTP Environmental Division - <http://www.whitehouse.gov/WH/EOP/OSTP/Environment/html/Environment.html>

Lawrence Livermore National Laboratory - <http://www.llnt.gov/04envir.html>

U.S. Fish and Wildlife Services - Home Page of the U.S. Fish and Wildlife Services - <http://www.fws.gov/>

Environmental Management Technical Center - Web Site providing free access to a wide variety of biological, physical, spatial, graphic, and written information relating to the Upper Mississippi River System and adjoining geographic areas - <http://www.emtc.nbs.gov/>

DOE Environmental Management Homepage - Home Page for Department of Energy (DOE) Environmental Management - <http://www.em.doe.gov/>

U.S. Natural Resources Conservation Service - Home Page of the U.S. Natural Resources Conservation Service - <http://www.ncg.nrcs.usda.gov>

Oak Ridge Environmental Research News - Web Site with Environmental Research News Provided

by the Oak Ridge National Laboratory Environmental Sciences Division - <http://www.esd.ornl.gov/ern/index.html>

FIE - Web Site with links to other Federal Government Web Sites - http://www.fie.com/www/us_gov.htm

DOE Risk Assessment and Management - Department of Energy Web Site with information concerning DOE Risk Assessment and Remediation Management - <http://xerxes.nas.edu:70/1/nap/online/doe>

U.S. National Library of Medicine - Web Site maintained by the U.S. National Library of Medicine - <http://www.nlm.nih.gov/>

NTIS - Home Page of the U.S. Department of Commerce National Technical Information Service (NTIS) - <http://www.ntis.gov/>

NTIS OrderNow Update - NTIS supplement providing product ordering information - <http://205.128.148.173/ordernow/>

NTIS Catalogs - NTIS catalogs - <http://www.fedworld.gov/ntis/catalogs.htm>

DOE ES&H - Home Page of the Department of Energy (DOE) Environment, Safety and Health (ES&H) Technical Information Services.

Provides safety and health professionals with reliable, accurate, and current information; and provides links to services, missions, and organizations of ES&H - <http://nattie.eh.doe.gov/>

FUSRAP - DOE Formerly Utilized Sites Remedial Action Program (FUSRAP) Web Site containing information about 46 environmental restoration sites in 14 states - <http://www.fusrap.doe.gov/>

National Academy of Sciences - Web Site for the National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council - <http://www.nas.edu/>

CMST-CP - Web Site providing information concerning the DOE funded Characterization, Monitoring, and Sensor Technology Crosscutting Program (CMST-CP) - <http://cmst.ameslab.gov/>

Innovative Technology Summary Reports - Web Site containing the DOE Office of Environmental Management Innovative Technology Summary Reports - <http://www.em.doe.gov/plumesfa/intech/index.html>

DOE Grand Junction Projects Office - Home Page of the DOE Grand Junction Projects Office - <http://www.doegjpo.com/>

Environmental Web Site Directories

Environmental Organization Web Directory - <http://www.webdirectory.com>

The Environmental Professional's Guide to the Net - <http://www.geopac.com/>

EnviroLink Network - <http://www.envirolink.org/>
EnviroLink Library

Environmental Links - <http://enviro.navy.mil/envlinks.htm>

EnviroLink Home - <http://envirolink.org/>

NEDI Catalog - National Environmental Data Index (NEDI) Catalog - <http://www.nedi.gov/NEDI-Catalog/>

GNET - The Global Network of Environmental & Technology - <http://www.gnet.org/>

Yahoo Environmental - http://www.yahoo.com/Environment_and_Nature/

Universities and Institutions

REGIS - Web Site with information on REGIS: Environmental Planning GIS at the University of California at Berkeley - <http://www.regis.berkeley.edu/>

Subject Index of Web Sites

Environmental Legislation

Natural Resources Defense Council - Web Site providing a legislative update on current environmental proposals - <http://www.nrdc.org/nrdc/field/state.html>

THOMAS: Legislative Information on the Net - Library of Congress Web Site providing text, history and current issues for proposed legislation and includes a searchable database, Congressional Record text, committee reports, historical documents, and information on the legislative process - <http://thomas.loc.gov>

Government Printing Office-Federal Register - Government Printing Office (GPO) Web Site providing fast, free, and simple access to the Federal Register on-line, allowing users to search for proposed legislation, notices, and final legislation by keywords, dates, Code of Federal Regulations (CFR), etc. - http://www.access.gpo.gov/su_docs/aces/aces140.html

Code of Federal Regulations - U.S. House of Representatives Internet Law Library providing access to the CFRs over the Internet free of charge - <http://law.house.gov/cfr.htm>

Environmental Federal Regulations - Environmental Professional's Home Page containing Federal Regulations - <http://www.clay.net/fedreg.html>

Environmental Justice

Environmental Justice LINK site - Web Site providing links to other sources of information on Environmental Justice (EJ) - <http://www.tc.msu.edu/tc960/ejlinks.htm>

Econet's EJ page - Web Site Provided by Econet containing information on Environmental Justice - <http://www.igc.apc.org/envjustice>

CDC's Agency EJ Site - Web Site provided by CDC's Agency for Toxic Substances and Disease Registry which maintains information on EJ, as well as links to government and non-government regulations, strategies, etc. - <http://atsdr1.atsdr.cdc.gov:8080/icbkmrk.html>

DoD EJ Strategy - Web Site containing information on the Department of Defense's strategy for Environmental Justice - <http://enviro.navy.mil/ejstrat.htm>

EPA EJ Site 1 - Web Site provided by the EPA with information on Environmental Justice - <http://www.epa.gov/docs/oejpubs/strategy/index.html>

EPA EJ Site 2 - Another Web Site provided by the EPA with information on Environmental Justice - <http://www.epa.gov/swerosps/ej/>

Environmental Remediation/ Restoration Technologies

Remediation Technology Profiles Index - Web Site provided by Ames Laboratory for Remediation Technology Profiles contained in DOE EM-0138P - http://sc94.ameslab.gov/OTD/tech_summs/Catalog/Tech_Cat_Remediat_index.html

VISITT - Web Site where the Vendor Information System for Innovative Treatment Technologies (VISITT) software can be downloaded - <http://www.prcemi.com/visitt>

Hazardous Substances/ Materials/Waste

ATSDR Hazardous Substance Release/Health Effects Database - Web Site provided by the Agency for Toxic Substances and Disease Registry (ATSDR) - <http://atsdr1.atsdr.cdc.gov:8080/hazdat.html>

ATSDR - Agency for Toxic Substances and Disease Registry Home Page - <http://atsdr1.atsdr.cdc.gov:8080/atsdrhome.html>

Air

Radon - Web Site concerning Radon information provided by the U.S. Geological Survey (USGS) - <http://sedwww.cr.usgs.gov:8080/radon/radonhome.html>

Water

American Water Works Association - American Water Works Association (AWWA) Web Site containing technical information, legislative/regulatory updates, and a professional discussion forum regarding drinking water and water pollution - <http://www.awwa.org/index.shtml>

Water Environment Federation - Water Environment Federation Web Site containing information on waste water and storm water, and includes a Clean Water Act legislative update, training information, technical references, and a professional discussion group - <http://www.wef.org>

Municipal Solid Waste

Solid Waste Associations of North America - Home Page of the Solid Waste Association of North America, a nonprofit organization whose mission is to advance the practice of municipal solid waste management - <http://www.swana.org/>

ISWA - Home Page of the International Solid Waste Association (ISWA), an international association representing individuals, companies, municipalities, public and private authorities, and associations in 85 countries. ISWA works to coordinate and promote research in the field of solid wastes and sludge, collection and transport of wastes, incineration and recycling of waste, biological waste treatment, and sanitary landfill - <http://www.history.rochester.edu/de/denmark/iswa/>

"Solid Waste Landfills" - "Solid Waste Landfills," a ten-lesson course teaching about landfill design and function - Phillip O'Leary and Patrick Walsh, - <http://wissago.uwex.edu/uwex/course/landfill/toc.html#toc>

EPA OSWER - Home Page of EPA Office of Solid Waste and Emergency Response (OSWER) - <http://es.inel.gov/program/epaorgs/oswer/oswer.html>

SW - Options - Web Site providing software to help municipal planners design and implement a municipal solid waste management program - <http://pandora.cecer.army.mil/facts/sheets/UL36.html>

EPA Municipal Solid Waste - Subtitle D - Web Site funded by EPA providing information on municipal solid waste - <http://www.epa.gov/OSWRCRA/non-hw/muncpl/>

Pollution Prevention

Ohio EPA Office of Pollution Prevention - Home Page of the Ohio EPA Office of Pollution Prevention - <http://www.epa.ohio.gov/opp/oppmain.html>

EPIC - Web Site for Department of Energy Pollution Prevention Information Clearinghouse - <http://146.138.5.107/epic.htm>

Los Alamos National Laboratory - Home Page of the Los Alamos National Laboratory providing

information on pollution prevention - <http://perseus.lanl.gov/HomePage.html>

Other Environmental

The WETLANDS - Web Site containing technical information concerning wetlands and endangered species, including Federal regulations, State regulations, implementation, and current policies - <http://www.wetlands.com/index.html>

National Wetlands Inventory - National Wetlands Inventory Web Site - <http://www.nwi.fws.gov>

National and Regional Wetland Plant Species list - National and Regional Wetland Plant Species List Web Site - <http://www.nwi.fws.gov/Ecology>

Advisory Council on Historic Preservation - Web Site containing information on proposals to amend the National Historic Preservation Act, preservation training, and compliance - <http://www.achp.gov/index.html>

Threatened and Endangered Species List - Threatened and Endangered Species List Web Site - <http://www.fws.gov/~r9endspp/listdate.html>

Newsgroups

Science Environment Newsgroups - <http://news:sci.environment/>

GIS Newsgroups - <http://news:comp.infosystems.gis/>

Engineering Newsgroups - <http://news:sci.engr/>

Civil Engineering Newsgroups - <http://news:sci.engr.civil/>

FedWorld - <http://www.fedworld.gov/>

Initiatives in Environmental Technology Investment - <http://www.wpi.org/uetc>

Environmental Compliance Online - <http://www.ieti.com/taylor/compliance.html>

Vendors

CHESS, Inc. - Home Page for Consulting Hydrogeology and Environmental Software Services - <http://www.us.net/adept/welcome.html>

3 Findings

The information compiled during the research process was stored in an Access (Microsoft, Inc.) database (called the ER/EC Database) for management and report generation. The database table structure is shown in Figure 1. The summary reports that have been generated from the compiled information are included in Appendices B - F. Additional, more detailed information will be provided on the Environmental FWG Web Site.

ER/EC Points-of-Contact

The individuals identified through the research and interviews as involved with the accomplishment of ER/EC activities are listed in Appendix B (Alphabetical Listing by Name) and Appendix C (Alphabetical Listing by Installation/Organization). A total of 200 individual POCs were identified.

The summary listings in Appendix B include POC name, office name and mailing address, work phone number, and E-mail address. The summary listings in Appendix C include POC name, office name, work phone number, and E-mail address. More detailed information is available in the ER/EC Database. The POC information contained in the ER/EC Database will be transferred to the Tri-Service Center's POC Database.

ER/EC CADD/GIS Initiatives

A total of 50 initiatives were identified, which are summarized in Appendix D.

In general, all Air Force bases are scheduled to have an environmental GIS in place by the end of FY97. The Air Force initiative is to map all IRP sites to the base comprehensive plan and link it to their IRPIMS database. The Air Force will use ArcView (ESRI, Inc.) for the GIS.

The Navy (NAVFACENGCOM, Southwest Division, San Diego, CA) is developing a GIS for NAS North Island. The system includes Environmental, such that Environmental is a module of the GIS. The GIS is being used to integrate functional codes and facilitate communication as well as being a valuable resource for graphic and non-graphic information.

NAVFACENGCOM, HQ has developed an Internet "GIS" that integrates BRAC activity maps with IRP sites. The information is obtained from the Navy's Environmental Database (NORM) and displayed when the user clicks on the IRP sites. This can be accessed from "www.ncts.navy.mil/homepages/navfac/env." The USMC (29 Palms) is mapping the ecology system on the Internet for NAWS China, Edwards Air Force Base, MCLB Barstow, and 29 Palms.

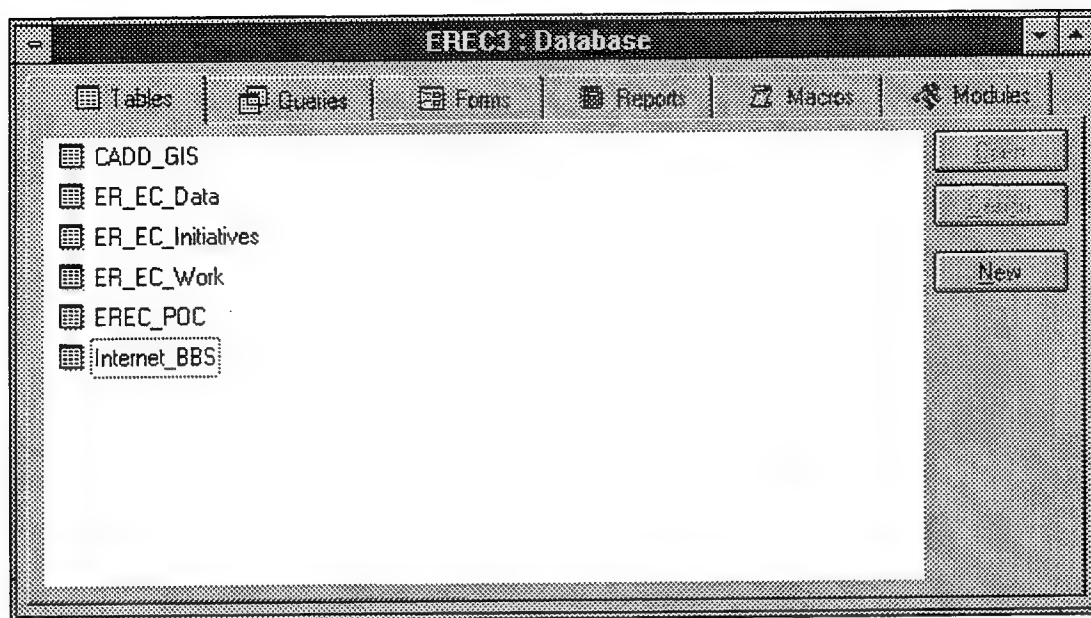


Figure 1. Environmental Restoration/Environmental Compliance Database Table Schema

Lakehurst Naval Air Station has developed an ARC/INFO (ESRI, Inc.) ER/EC GIS.

Several of the USACE District offices have been using GIS for mapping civil works projects for several years and are beginning to use GIS for ER/EC activities. River Environmental Geographical Information System (REGIS), is used for hydrological surveys, navigational charts, and levee profiles. The COE District offices, in general, have more experience with CADD/GIS than the other services.

Fort Bliss is incorporating the Tri-Service Spatial Data Standards into an ARC/INFO GIS with an Oracle database for Pan American Center for Environmental Studies (PACES) program for monitoring environmental change along the United States and Mexican borders. Environmental changes to be monitored are vegetation, animal life, water quality, etc. The project involves partnering with NASA and the University of Texas, El Paso.

The Tri-Service CADD/GIS Technology Center has developed the TSSDS which include standards for the development of ER/EC GIS and spatial data management systems.

Use of CADD/GIS Technology in Accomplishing Environmental Restoration/ Compliance Activities

A total of 83 responses on the use of CADD and/or GIS in the accomplishment of ER/EC activities are summarized in Appendix E.

Information concerning the types of CADD and/or GIS software used was also collected and stored in the ER/EC Database. A summary of the different types of software is not provided in this report, but can be provided upon request.

Available Electronic Information and Data

A summary of installations/offices which responded to portions of the survey concerning available electronic information and data is included in Appendix F. The categories of available electronic information and data include:

- a.* Digital Aerial Photography.
- b.* Air Quality Data.
- c.* Cadastral Data.
- d.* Geological Data.
- e.* Surface Water Quality Data.
- f.* Remedial Design/Action Specifications.
- g.* Soil Quality Data.
- h.* Sediment Quality Data.
- i.* Risk Assessment Data.
- j.* Regulatory Criteria.
- k.* Orthophotos.
- l.* Hydrographic Data.
- m.* Groundwater Hydrology Data.
- n.* Groundwater Quality Data.
- o.* GIS Data.
- n.* Wetlands Data.
- q.* Other Digital Data.

Appendix A

Information Sheet and Survey Questionnaire Form

Tri-Service CADD/GIS Technology Center Environmental Field Working Group Environmental Restoration and Environmental Compliance ER/EC Activities Survey Information Sheet

PRIVACY ACT STATEMENT:

AUTHORITY: 5USC 301,10 USC 8012

PURPOSE: The Tri-Service CADD/GIS Technology Center's (Tri-Service Center's) Environmental Field Working Group is currently undertaking an effort to identify and review ER/EC initiatives, and to communicate with other agencies and organizations involved with such activities. The ER/EC initiatives are to include existing initiatives, initiatives currently under development, and initiatives to be developed in the future. The agencies and organizations of concern include the Department of Defense (DoD); Environmental Protection Agency (EPA); other branches of the federal, state, and local government; research institutions; and universities.

The purpose of this effort is two-fold: (1) Minimize the duplication of effort, encourage communication, and facilitate the transfer of available information and knowledge concerning ER/EC activities between the various DoD, EPA, non-DoD Federal Government, schools/universities, contractor, and other appropriate organizations and (2) Determine the extent that CADD, GIS, and other computerized technologies are used for accomplishing ER and EC activities, determine training needs, and determine methods for facilitating the greater usage of these technologies in the future.

The findings of this effort will be summarized in a technical report that will be available for distribution throughout the DoD, Federal Government, and public. An electronic version of the report will be made

available on the Tri-Service Center's Homepage on the Internet at address <http://mr2.wes.army.mil>. The Tri-Service Center will submit a summary of the CADD/GIS usage, the identified CADD/GIS training needs, and the identified future CADD/GIS software capability needs to the various CADD and GIS software vendors. The Tri-Service Center will develop the CADD/GIS training sessions which are not commercially available.

ROUTINE USES: Information gathered through this survey will be included in a technical report, the purpose of which will be to encourage communication and facilitate the transfer of available information and knowledge concerning ER/EC activities between the various DoD, EPA, non-DoD Federal Government, schools/universities, contractor, and other appropriate organizations.

STATUS OF RESPONDENT PARTICIPATION: Participation is voluntary.

ACTIONS TO BE TAKEN IF ALL OR PART OF THE REQUESTED INFORMATION IS NOT PROVIDED: No action will be taken if the members do not wish to complete this questionnaire.

GENERAL: The Tri-Service Center was established at the U.S. Army Engineer (USAE) Waterways Experiment Station (WES), Information Technology Laboratory (ITL), Vicksburg, Mississippi, in October 1992. Its mission is to function as a coordination center and rely on the capabilities throughout the DoD for the accomplishment of specific tasks and application development related to CADD/GIS applications and technology. The functions of the Tri-Service Center are to provide limited applications development, promote communications, develop standards, provide technical consultation, provide a technical role in acquisitions, interface with professional organizations and industry, evaluate technological developments, and recommend necessary CADD/GIS policy.

The function of the Tri-Service Center's Environmental Field Working Group (EFWG) is to provide guidance and input, recommend projects, identify needs, and assist the Tri-Service Center in accomplishing its projects, specifically in the area of environmental management (e.g., environmental engineering, restoration, and compliance).

The Tri-Service Center functions under the guidance and direction of the Executive Steering Group composed of Dr. Robert Wolff (Air Force), present chairman of the group; Dr. Get Moy (Navy); Capt. James Jarrell (Navy); Mr. Charlie Cheung (Army Corps of Engineers); Mr. Doug Kamien (Army Corps of Engineers); Col. Peter Sowa (Army); and Mr. Steven Stockton (Army Corps of Engineers).

The goals and objectives of the Tri-Service Center are reviewed and guided by the Executive Working Group, currently chaired by Mr. Ed East (Army Corps of Engineers), and composed of Dr. N. Radhakrishnan (WES); Mr. Deke Smith (Navy), Mr. Stan Shelton (Army), Lt. Col. Stephen Waller (Air Force), Mr. Don Ritenour (Air Force), Mr. M.K. Miles (Army Corps of Engineers), Mr. Jim Carberry (Navy), Mr. Tom Rutherford (OSD), Mr. Gary Huneycutt (Air Force); Mr. Jeff Huskey (Navy); and Mr. Paul Herold (Coast Guard).

Dr. Robert W. Whalin is the Director of WES, and COL Bruce K. Howard, EN, is the Commander. Dr. N. Radhakrishnan is the Director of ITL, and Mr. John Hood, PE, is the acting Chief of the Tri-Service Center.

The members of the EFWG currently include Mr. Christopher Kyburg, SW Division Naval Facilities Engineering Command (NAVFACENGCOM), present chairman of the group; Mr. Sam Bass, USAE

District, Omaha, Corps of Engineers Hazardous, Toxic, and Radioactive Waste (HTRW) Center of Expertise, present vice-chairman; Mr. Steven Gonzales, NAVFAC HQ; Mr. Tom Stephan, Northern Division NAVFACENGCOM; Mr. Phil Hunter, HQ Air Force Center for Environmental Excellence (AFCEE); Mr. Mung Lun Yuen, HQ AFCEE; Mr. Lawrence Mann, USAE District, Seattle; Ms. Vicky Cwiertnie, Army Aberdeen Proving Ground; Mr. Kamel Mardini, Air Force Aeronautical Systems Center (ASC); and Ms. Terri Bright, Army Environmental Center.

DEFINITIONS: For the purpose of this survey, the following terms and definitions apply:

Environmental Restoration (ER) - Activities such as site assessments; site investigations; studies; feasibility studies; remedial designs; remedial actions; treatment, reduction, or removal concerning hazardous, toxic, and radioactive waste (HTRW), ordnance and explosive waste (OEW), chemical warfare materials, and biological warfare materials in the air, soil, sediment, groundwater, and/or surface water, which are, or have the potential to be, detrimental to life and ecosystems on the earth. Also called environmental remediation and environmental cleanup. Includes the Installation Restoration Program (IRP), Defense Environmental Restoration Program at Formerly Used Defense Sites (DERP-FUDS), and Superfund.

Environmental Compliance (EC) - Activities involving the management of chemicals and hazardous materials and wastes, processes, and activities in such a manner to comply with federal, state, and/or local environmental laws and regulations. Also includes studies and abatement activities involving building environmental hazards (e.g., asbestos, lead, radon, PCBs, etc.), and the management of fuel and chemical storage tanks and appurtenances, and hazardous materials and hazardous waste.

ER/EC Initiative - This survey focuses on past, current, and/or future ER/EC initiatives. For the purpose of this effort, an ER/EC initiative can consist of four main topics:

- a. ER/EC programs and projects which made/make use of CADD and/or GIS technology.
- b. Sources of the essential information and requirements (in electronic format) for ER/EC activities (e.g., federal, state, and/or local regulations; state, local, and federal regulator-accepted cleanup criteria and concentrations; background concentration data; risk assessment criteria and data; material safety data sheets (MSDS); applicable or relevant and appropriate requirements (ARARs); lessons learned; CADD details; standard operating procedures (SOPs); historic and current air, soil, groundwater, surface water, and sediment environmental quality data; historic and current aerial photographs and maps; boring and well logs, development data, and monitoring data.) The sources of information may be available either through Internet web pages, electronic bulletin boards, or an office which disseminates the information.
- c. Database schemata and programs designed to manage data and facilitate the accomplishment of ER/EC activities.
- d. Computer programs which perform analysis, management, modeling, or other functions relating to ER/EC activities.

SURVEY INSTRUCTIONS:

This survey has been designed to require a minimum completion time and can be completed by one person in each separate office within an organization involved with ER/EC activities. Each individual completing and returning the questionnaire will be provided a copy of the completed technical report and will be placed on the Tri-Service CADD/GIS Technology Center's mailing list to receive future information concerning the Center's programs and CADD/GIS items of interest in the fields of ER/EC. If you have any questions concerning this effort, please contact **Bobby Carpenter** at phone no. (601) 634-4572.

Please mail, FAX, or email the completed questionnaire to the following address:

Bobby Carpenter
Tri-Service CADD/GIS Technology Center
Waterways Experiment Station
CEWES-IM-DA
3909 Halls Ferry Road
Vicksburg, MS 39180-6199
Fax no. 601-634-4584
email address: carpenb@ex1.wes.army.mil

Additional information concerning this effort can also be provided by the following individuals:

Larry Mann USAE District, Seattle; phone no. 206-764-6737 email address -
lawrence.v.mann@nps.usace.army.mil

Mung Lun Yuen HQ Air Force Center for Environmental Excellence; phone no. 210-536-4170.

Philip Hunter HQ Air Force Center for Environmental Excellence; phone no. 210-536-5281; email address - phunter@afceeb1.brooks.af.mil.

Terri Bright Army Environmental Center; phone no. 410-612-7078; email address -
tabright@aec1.apgea.army.mil

Victoria Cwiernie Army Aberdeen Proving Ground; phone no. 410-278-6755; email address -
vcwiert@eagle.apg.army.mil.

Sam Bass USAE Hazardous and Toxic Waste Mandatory Center of Expertise (HTWMCX); phone no. 402-697-2654; email address - c0edtdbb@mrd42.usace.army.mil.

Christopher Kyburg Southwest Division, Naval Facilities Engineering Command; phone no. 619-532-1998; email address - cekyburg@efdsouthwest.navy.mil.

Steve Gonzales HQ Naval Facilities Engineering Command; phone no. 703-325-0356; email address -
scgonzales@hq.navy.mil.

**Tri-Service CADD/GIS Technology Center's
Environmental Field Working Group
Environmental Restoration (ER) and
Environmental Compliance (EC) Activities
Initiatives Survey**

1. Name of Point-of-Contact (POC) _____
2. Discipline (e.g., geologist, environmental engineer) _____
3. Commercial Phone Number _____ - _____
4. FAX Number _____ - _____
5. Internet E-mail Address _____
6. Position (e.g., Chief, Environmental Branch) _____
7. Organization Category (check one that applies)
_____ a. Federal Government _____ b. State Government _____ c. Local Government
_____ d. University _____ e. Institution _____ f. Commercial
_____ g. Other _____
8. Major Government or Organization Department (check one that applies)
_____ a. DoD _____ b. Department of Agriculture _____ c. Department of Interior _____ d. Department of Commerce
_____ e. Department of Energy _____ f. Environmental Protection Agency _____ g. Other _____

9. Government or Organization Branch (check one that applies)
_____ a. Air Force _____ b. Army _____ c. Army Corps of Engineers _____ d. Marines
_____ e. Navy _____ f. Coast Guard _____ g. Other (e.g., for non-DoD Organization) _____
10. Installation or Office Name (e.g., Waterways Experiment Station, Tindall AFB) _____

11. Office Title (e.g., Environmental Restoration Branch) _____
12. Office Code (e.g., CEWES-IM-DA) _____

13. Mailing Address _____

14. Do you currently have the capability to access the Internet? (circle one)

YES NO

15. Does your organization have an Internet web page? (circle one)

YES NO

16. Brief description of Internet and/or bulletin board resources provided by your organization (if applicable)

Internet URL Address _____

FTP Address _____

TELNET Address _____

Bulletin Board Phone Number _____

17. Categories of ER/EC Work Performed (check all that apply)

a. Environmental Restoration.

_____ (1) Installation Restoration Program (IRP) _____ (2) Superfund _____ (3) Civil Works
_____ (4) Defense Environmental Restoration Program - Formerly Used Defense Sites (DERP-FUDS)
_____ (5) Hazardous, Toxic, and Radioactive Waste (HTRW) _____ (6) Medical Waste
_____ (7) Ordnance and Explosive Waste _____ (8) Chemical Warfare Materials
_____ (9) Biological Warfare Materials _____ (10) Research _____ (11) Other _____

b. Environmental Compliance.

_____ (1) Hazardous Materials Management _____ (2) Hazardous Waste Management
_____ (3) Storage Tank Management _____ (4) Building Environmental Hazards (e.g., asbestos, lead paint, radon)
_____ (5) Air Emissions _____ (6) Noise _____ (7) Storm Water _____ (8) Industrial Waste
_____ (9) RCRA Compliance _____ (10) Solid Waste Management _____ (11) Recycling
_____ (12) Research _____ (13) _____

18. Phase(s) of ER/EC Work Performed (check all that apply)

- | | | |
|-------------------------------|------------------------------|-------------------------------------|
| _____ a. Site Assessments | _____ b. Site Investigations | _____ c. Feasibility Studies |
| _____ d. Treatability Studies | _____ e. Remedial Design | _____ f. Remedial Action |
| _____ g. Monitoring | _____ h. Reporting | _____ i. Project/Program Management |
| _____ j. Risk Assessment | _____ k. Asbestos Abatement | _____ l. Lead Paint Abatement |
| _____ m. Facility Management | _____ n. Research | _____ o. Other _____ |

19. Does your organization have ER/EC Electronic Information or Data Available which can be used by other Government/DoD Organizations? (circle one)

YES

NO

20. Type of Available ER/EC Electronic Information or Data (check all that apply)

TYPE <i>Also include data which can be used for ER/EC activities</i>	STATE(S) IN WHICH LOCATED <i>Use two-character abbreviation (e.g., CA = California)</i>	AVAILABILITY <i>U = Unlimited/ Unrestricted R = Restricted O = Official Use Only _____</i>
_____ a. Topographic Survey Data	_____	_____
_____ b. Hydrographic Survey Data	_____	_____
_____ c. Aerial Photography	_____	_____
_____ d. Cadastral/Real Estate Data	_____	_____
_____ e. Orthophotos	_____	_____
_____ f. Groundwater Quality Data	_____	_____
_____ g. Surface Water Quality Data	_____	_____
_____ h. Air Quality Data	_____	_____
_____ i. Sediment Quality Data	_____	_____
_____ j. Soil Quality Data	_____	_____
_____ k. CADD Drawings/Maps (Remedial Design/ Action, Abatement)	_____	_____
_____ l. Risk Assessment Data	_____	_____
_____ m. Specifications (Remedial Design/Action, Abate- ment, etc.)	_____	_____

_____ n. Federal/State/Local Regulatory Criteria & Data	_____	_____
_____ o. Groundwater Hydrology (e.g., aquifers, water levels, gradient)	_____	_____
_____ p. Geological Data (e.g., lithology, stratigraphy)	_____	_____
_____ q. GIS maps and data	_____	_____
_____ r. Wetlands	_____	_____
_____ s. Other (_____)	_____	_____
_____ t. Other (_____)	_____	_____

21. Is Computer-Aided Design and Drafting (CADD) software used to accomplish, or assist in the accomplishment of, any phase of ER/EC activities? (circle all that apply)

YES NO YES (by contractor)

22. What "Basic" CADD software is used for ER/EC activities? (Check all that apply and provide any other applicable CADD software type.)

- | | | |
|-----------------------------------|----------------------------------|----------------------------------|
| _____ a. AutoCAD/UNIX | _____ b. AutoCAD/Windows NT | _____ c. AutoCAD/Windows 3.x |
| _____ d. AutoCAD/Windows 95 | _____ e. MicroStation/UNIX | _____ f. MicroStation/Windows NT |
| _____ g. MicroStation/Windows 3.x | _____ h. MicroStation/Windows 95 | |
| _____ i. Other _____ | | |

23. What CADD application software(s) is/are used? (A CADD application software package operates "on-top-of," or in conjunction with, the basic CADD software package; (e.g., Intergraph Insitu). (List any CADD application software packages used.)

24. Is Geographic Information System (GIS) software used to accomplish, or assist in the accomplishment of, any phase of the ER/EC work? (circle all that apply)

YES NO YES (by contractor)

25. What "Basic" GIS and "desktop mapping" is used for ER/EC activities? (Check all that apply, and provide any other applicable GIS software type.)

- | | | |
|------------------------------|------------------------------------|---------------------------|
| _____ a. Intergraph MGE/UNIX | _____ b. Intergraph MGE/Windows NT | _____ c. GRASS |
| _____ d. ESRI ARC/INFO-UNIX | _____ e. ESRI ArcCAD | _____ f. ESRI PC ARC/INFO |
| _____ g. ESRI ArcView | _____ h. Intergraph VistaMap | _____ i. MapInfo |
| _____ j. Other _____ | | |

27. What database management system software (DBMS) is used either with the CADD and/or GIS software or for other ER/EC activities? (check all that apply)

_____ a. Oracle _____ b. Informix _____ c. dBase IV _____ d. Sybase _____ e. Foxpro
f. Microsoft SOL _____ g. Microsoft Access _____ h. Other _____

28. Is database schema/design structure available for use by other government/DoD organizations? (circle one)

YES NO

29. Initiative Summary/Description and Status (e.g., *Project/Program Name, Project/Program Location, Scope, Contractor Name and Address, Contractor POC (optional), and Major Milestones*)

Optional information to assist the Tri-Service CADD/GIS Technology Center in serving you better:

30. Approximate number of years of CADD usage for ER/EC type work (check one)

_____ a. 1 - 2 years _____ b. 2 - 5 years _____ c. More than 5 years
_____ d. None, and will probably not be used in near future. _____ e. None, but will possibly be used in near future.
_____ f. None, but will definitely be used in near future.

31. Approximate number of years of GIS usage for ER/EC type work (check one)

- _____ a. 1 - 2 years _____ b. 2 - 5 years _____ c. More than 5 years
 _____ d. None, and will probably not be used in near future. _____ e. None, but will possibly be used in near future.
 _____ f. None, but will definitely be used in near future.

32. What types of CADD/GIS/computer training would help you and/or others in your office do ER/EC work activities better? (Check and provide information for all that apply)

- _____ a. Introductory Use of CADD for ER/EC, Type Preferred (e.g., AutoCAD, MicroStation) _____
 _____ b. Introductory Use of GIS for ER/EC, Type Preferred (e.g., ARC/INFO, MGE) _____

- _____ c. How to use CADD software for (give specific types of activities; e.g., manage monitoring well and sampling data)

- _____ d. How to use GIS software for (give specific types of activities; e.g., manage monitoring well and sampling data)

- _____ e. How to use a computer software program which (give specific types of activities; e.g., model contamination plumes)

- _____ f. Others

33. What types of CADD/GIS/computer software capabilities or enhancements do you believe would increase your office's productivity in accomplishing ER/EC related work? (List recommendations)

34. What types of government-developed computer programs are used for your office's ER/EC related work? (List computer software packages used)

Function	Software/Program Name	Manufacturer Name
example: Project Management	FUDS Database	Waterways Experiment Station
example: Feasibility Studies/Remedial Design	Visitt	Environmental Protection Agency
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

35. What type, version, and source of commercially available non-CADD/GIS computer program software is used for your office's ER/EC related work? (e.g., volume visualization and analysis modeling, Voxel Analyst NT, Intergraph Corporation)

36. Are you interested in serving as a member of the Environmental Field Working Group or assisting the Tri-Service CADD/GIS Technology Center on an ER/EC related project? (circle one)

YES NO

37. Comments:

Please mail, fax, or E-mail the completed form to the following address:

Bobby Carpenter, Tri-Service CADD/GIS Technology Center, USAE Waterways Experiment Station, CEWES-IM-DA, 3909 Halls Ferry Road, Vicksburg, MS 39180-6199.

phone no. (601) 634-4572 fax no. (601) 634-4584

E-mail address: carpenb@ex1.wes.army.mil

Appendix B

Points-of-Contact - Alphabetical Listing by Name

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)

09-Oct-96

Name	Mailing Address	Phone Number	Email Address
Mr. Wayne Abrigo	NAVFACENGCOM, Pacific Division Code 04G Pearl Harbor, HI 96860	(808) 474-5324	wabugo@efdpac.navy.mil
Mr. Paul Albertson	USAE Waterways Experiment Station CEWES-GG-YG 3909 Halls Ferry Rd Vicksburg, MS 39180-6199	(601) 634-3148	albertp@ex1.wes.army.mil
Mr. Kevin Anderson	USAE District, Rock Island CENCR-PD-GD P.O. Box 2004 Rock Island, IL 61204-2004	(309) 794-5586	kevin.l.anderson@milncrmil.ncr.usace.army.mil
Ms. Trish Anslow	USAE District, Little Rock CESWL-PL-A P.O. Box 867 Little Rock, AR 72203-0867	(501) 324-5836	trish@enviro.swl.usace.army.mil
Mr. Clinton L. Anuszewski	USAE District, Baltimore CENAB-EN-HT P.O. Box 1715 Baltimore, MD 21203-1715	(410) 962-4454	
Mr. Fred Baglione	USAE District, Buffalo CENCB-PE-PT 1776 Niagara Street Buffalo, NY 14207-3199	(716) 879-4418	
Ms. Tanya Banks	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-4182	
Mr. Sam Bass	USAE District, Omaha CEMRO-HX-G 12565 W. Center Rd. Omaha, NE 68144-3869	(402) 697-2654	don.b.bass@mrd01.usace.army.mil

(Sheet 1 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Mr. Reese Batten	NAVFACENGCOM, Southern Division Code 18 2155 Eagle Drive North Charleston, SC 29419	(803) 820-5578	erbatten@efdsouth.navfac.navy.mil
Mr. Stan Bauer	USAE District, Omaha CEMRO-MD-HB 215 North 17th Street Omaha, NE 68102-4978	(402) 221-7831	
Mr. Charles Becker	Pine Bluff Arsenal Attn: Charles Becker 10020 Kabrich Circle Pine Bluff, AR 71602-9500	(501) 540-2834	
Ms. Barbara Bedford	Barbara Bedford AFFTC/EM 70 N Wolfe Ave Edwards AFB, CA 93524-6225	(805) 277-1458	bedfordb%om@mhs.elan.af.mil
Mr. Warren Beer	Warren Beer U.S. EPA Region IX P-5-2 75 Hawthorne Street San Francisco, CA 94105	(415) 744-1803	
Mr. Lincoln Blake	USAE District, Charleston CESACP-MS P.O. Box 919 Charleston, SC 19402-0919	(803) 727-4343	
Ms. Sheila Bloom	USAE District, Baltimore CENAB-PP-E P.O. Box 1715 Baltimore, MD 21203-1715	(410) 962-6782	
Mr. Dave Brauwer	USAE District, New York CENAN-PP-E Jacob K. Javits Federal Building New York, NY 10278-0090	(908) 435-0079	

(Sheet 2 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Mr. Tom Brent	Crane Naval Weapons Support Center 300 Highway 361 Crane, IN 47522-5003	(812) 854-6160	
Mr. Robert Bridgers	USAE District, Jacksonville CESAJ-DP P.O. Box 4970 Jacksonville, FL 32232-0019	(904) 232-3085	
Mr. Bob Britton	USAE Division, Huntsville CEHND-OE-PM P.O. Box 1600 Huntsville, AL 35807-4301	(205) 895-1545	
Mr. Charles Brown	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-4203	
Mr. Cheryl Buckel	USAE District, Albuquerque CESWA-PP-M P.O. Box 1580 Albuquerque, NM 87102	(505) 254-3208	
Mr. Wayne Budrus	USAE District, Huntington CEORH-DL-M 502 8th Street Huntington, WV 25701-2070	(304) 529-5507	
Mr. Greg Bury	Commanding Officer, NAES Code 84320B5-2 Lakehurst Naval Air Engineering Station Lakehurst, NJ 08733-5069	(908) 323-1014	buryg@lakehurst.navy.mil
Ms. Carol Cady	Carol Cady 85 First St. West Public Works Fort Drum, NY 13602-5097	(315) 772-4852	
(Sheet 3 of 25)			

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
CA Robert Cantwell	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-4202	
Mr. Bobby G. Carpenter	USAE Waterways Experiment Station CEWES-ID-C 3909 Halls Ferry Road Vicksburg, MS 39180-6199	(601) 634-4572	carpenb@ex1.wes.army.mil
Mr. Jim Carper	USAE District, Wilmington CESAW-PH-C P.O. Box 1890 Wilmington, NC 28402-1890	(910) 251-4670	
Ms. Nancy Carper	HQ AF Center for Environmental Excellence HQ AFCEE/EP 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-4964	
Mr. Joseph Cecile	Joseph Cecile OC-ALC/EMR 7701 2nd St., Ste 204 Tinker AFB, OK 73145-9100	(405) 734-3058	jcecle@p025.tinker.af.mil
Mr. Gary Chisholm	USAE District, Louisville CEORL-DL-B P.O. Box 59 Louisville, KY 40202	(502) 625-7010	
Mr. Pat Christman	Pat Christman SM/ALC/EMR 5050 Dudley Blvd., Ste 3 McClellan AFB, CA 95652-1389	(916) 643-0830	
Mr. J. Dale Clark	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3668	

(Sheet 4 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Mr. John R. Clayton	Intergraph Services Company Attn: John R. Clayton 2917 Martin Terrace Haymarket, VA 20169	(703) 753-2658	
Mr. Jerry Cleaver	Jerry Cleaver AF Base Conversion Agency 1700 North Moore St., Suite 2300 Arlington, VA 22209-2802	(703) 696-5539	jcleaver(space)@(space)afbdat.hq.af.mil
Mr. Paul Clouse	USAE District, St. Louis CEMS-ED 12222 Spruce Sireet St. Louis, MO 63103-2833	(314) 331-8390	paul.clouse@usace.army.mil
Mr. Turner Cole	NAVFACENGCOM, Atlantic Division ATTN: Code 20G 1510 Milbert St. Norfolk, VA 23511-2699	(804) 322-4896	colett@efdlant.navfac.navy.mil
Mr. Calvin Conquer	USAE District, Forth Worth CESWF-PM-J P.O. Box 17300 Fort Worth, TX 76102-0300	(817) 774-2719	
Mr. Tim Corbett	Tim Corbett HQ AMC/CEVR 507 A Street Scott AFB, IL 62225-5022	(618) 256-8343	
Mr. Steve Corley	USAE District, Little Rock CESWL-ED-ED P.O. Box 867 Little Rock, AR 72203-0867	(501) 324-5710	steve.c.corley@usace.army.mil
Lt. Col. Darrel Cornell	Lt. Col. Darrel Cornell AFCEE/ERC Brooks AFB, TX 78235	(210) 536-5282	
(Sheet 5 of 25)			

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Ms. Sharon Cother	USAE District, St. Louis CELMS-PM-M 1222 Spruce Street St. Louis, MO 63103-2833	(314) 331-8045	
Mr. Bill Craven	USAE District, Huntsville Attn: Bill Craven 4820 University Sq Huntsville, AL 35816	(205) 895-1612	
LT Cathy Crawford	HQ AF Center for Environmental Excellence HQ AFCEE/ECM 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3381	
Ms. Victoria L. Cwierthie	Victoria L. Cwierthie Attn: STEAP-SH-ER Bldg 5650 APG, MD 21005	(410) 278-6756	
Ms. Vickie Damm	Vickie Damm U.S. EPA Region VII 726 Minnesota Avenue Kansas City, KS 66101	(913) 551-7247	
Ms. Lori Danielson	USAE District, Seattle CENPS-IM-PI P.O. Box 3755 Seattle, WA 98124-2255	(206) 764-6084	lori.danielson@internet.nps.usace.army
Mr. Patrick N. Deliman	USAE Waterways Experiment Station CEWES-ES-Q 3909 Halls Ferry Road Vicksburg, MS 39180-6199	(601) 634-3623	delimap@ex1.wes.army.mil
Mr. Bob Dempsey	USAE District, St Paul CENCS-PE-M 190 5th Street East St Paul, MN 55101-1638	(612) 290-5759	

(Sheet 6 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Mr. Thomas M. DeWitte	USAE District, Rock Island P.O. Box 2004 Rock Island, IL 61204-2004	(309) 794-6153	
Mr. Bob Dworkin	Usae District, Omaha NE	(703) 325-7715	
Mr. Glenn Earhart	USAE District, Baltimore CENAB-PP-E P.O. Box 1715 Baltimore, MD 21203-1715	(410) 962-6113	
Mr. Terry Edwards	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-5478	
Ms. Sandra Elliott	Sandra Elliott ACC/CES/ESV 129 Andrew St., Ste 102 Langley AFB, TX 23665	(804) 764-3514	
CA John Enyeart	HQ AF Center for Environmental Excellence HQ AFCEE/ECM 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-5632	
Ms. Sharon Ernst	USAE Division, South Atlantic CESAD-PM-M 77 Forsyth Street, SW, Room 313 Atlanta, GA 30355-6801	(404) 331-2495	
Mr. Steve Farmer	USAE District, Vicksburg CELMK-ED-DR 2101 North Frontage Road Vicksburg, MS 39180-5191	(601) 631-5551	
Mr. Jonathan Farthing	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3787	

(Sheet 7 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Ms. Sandra Fechner	Sandra Fechner 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3420	sfechner@afceeb1.brooks.af.mil
Mr. Neil Fehr	U.S. Army Corps of Engineers CEMRK-EP-EP 601 E. 12th St. Kansas City, MO 64014	(816) 426-5535	neil.fehr@mrk01.usace.army.mil
CO Patrick Fink	HQ AF Center for Environmental Excellence HQ AFCEE/EP 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3332	
Mr. James Flock	USAE District, New Orleans CELMN-ED-S P.O. Box 60267 New Orleans, LA 70160-0267	(504) 862-2565	james.flock@mail.usace.army.mil
Mr. Max Frauenthal	USAE District, Little Rock P.O. Box 867 700 W. Capitol Little Rock, AR 72203-0867	(501) 324-5888	max.frauenthal@swl01.usace.army.mil
Mr. George Fujimoto	George Fujimoto HQ PACAF/CEVR 25 E Street, Ste D306 Hickam AFB, HI 96853-5412	(808) 448-0470	
Mr. Bob Furlong	Bob Furlong HQ USAF/CEVR 115 Brookley Ave. Bolling AFB, DC 20332-5106		furlong@cevr.pent.afce
Mr. Wayne Galloway	USAE District, Huntsville CEHND-OE-ES P.O. Box 1600 Huntsville, AL 35807-4301	(205) 895-1582	

(Sheet 8 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Ms. Beth Garland	Beth Garland AFCEE/ERC Brooks AFB, TX 78235-5363	(210) 536-5658	
Mr. Roger Gauthier	USAE District, Detroit CENCE-EP-HG P.O. Box 1027 Detroit, MI 48231-1027	(313) 226-3054	gauthier@great_lakes.net
MA Donald Gleason	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-6417	
Mr. Steven C. Gonzales	NAVFACENGCOM, HQ Code 42 200 Stovall St. Alexandria, VA 22332-2300	(703) 325-0356	sogonzales@hq.navy.mil
Mr. Mark Goodwin	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-5480	
Mr. Bill Grannis	Bill Grannis 15 CES/CEVR 75 H Street Hickam AFB, HI 96853-5233	(808) 449-9073	
Mr. Rob Green	USAE District, Vicksburg CELMK-ED-DR 2101 North Frontage Road Vicksburg, MS 39180-5191	(601) 631-5940	
Mr. Mike Gross	USAE District, Portland CENPP-PE-DC P.O. Box 2946 Portland, OR 97208-2946	(503) 326-6489	

(Sheet 9 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)

Name	Mailing Address	Phone Number	Email Address
CO Thomas Gross	HQ AF Center for Environmental Excellence HQ AFCEE/EP 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3869	
Mr. Phil Grosseack	USAE District, Sacramento CESPK-ED-EH 1325 J. Street Sacramento, CA 95814-2922	(916) 557-7630	
Mr. Roger Hager	USAE Division, Missouri River CEMRD-ET-HS 12565 West Center Rd. Omaha, NE 68144	(402) 697-2619	
Mr. Moon Y. Han	USAE Division, Pacific CENPD-PM-MP P.O. Box 2870 Portland, OR 97208-2870	(503) 326-7361	
Mr. Jim Harrigan	USAE Division, Southwestern CESWD-PP-M 1114 Commerce Street, Room 404 Dallas, TX 75242-0216	(214) 767-2403	
Ms. Margaret Harris	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-5649	
Ms. Lisa Hedin	USAE District, St Paul CENCS-PE-M 190 5th Street East St Paul, MN 55101-1638	(612) 290-5443	
Ms Linda Hejazi	USAE District, Nashville CEORN-ER-M P.O. Box 1070 Nashville, TN 37202-1070	(615) 736-5966	

(Sheet 10 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Mr. Tom Hendrix	USAE District, Tulsa CESWT-PP 1645 S 101 East Avenue Tulsa, OK 74128-4629	(918) 669-7238	
Mr. John Hess	USAE District, Sacramento CESPIK 1325 J Street Sacramento, CA 95814-2922	(916) 557-7625	
Mr. Bruce Higgins	USAE District, Seattle CENPS-EN-GT P.O. Box 3755 Seattle, WA 98124-2255	(206) 764-3320	bruce.j.higgins@nps.usace.army.mil
Ms. Rebecca Hobbs	Rebecca Hobbs AFFTC/EM 70 N Wolfe Ave Edwards AFB, CA 93524-6225	(805) 277-1409	Hobbsr%em@mhs.elan.af.mil
Ms. Catherine Holland	USAE District, Alaska CENPA-EN P.O. Box 898 Anchorage, AK 99506-0898	(907) 753-2664	catherine.e.holland@usace.army.mil
Dr. J. P. Holland	USAE Waterways Experiment Station CEWES-HV-E 3909 Halls Ferry Road Vicksburg, MS 39180-6199	(601) 634-2644	holland@hl.wes.army.mil
Mr. Mark Holt	Mark Holt OO-ALC/EMR 7274 Wardleigh Rd Hill AFB, UT 84056	(801) 777-3684	holtm@hillwpos.hill.af.mil
Mr. Bill Holtham	USAE Division, New England CENED-PD-M 424 Trapelo Road Waltham, MA 02254-9149	(617) 647-8670	

(Sheet 11 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
MAJ Max Hughey	USAE District, Mobile CESAM-PM-SP P.O. Box 2288 Mobile, AL 36628-0001	(334) 694-4634	
Mr. Tony Hunt	USAE Division, Huntsville CEHNZ-ED-CS-D P.O. Box 1600 Huntsville, AL 35807-4301	(205) 895-1615	huntt@smtp.hnd.usace.army.mil
Mr. Phil Hunter	Phil Hunter AFCEE/ERC 8004 Chenault Dr. Brooks AFB, TX 78235	(210) 536-5281	
Mr. Philip M. Hunter	HQ AF Center for Environmental Excellence HQ AFCEE/ERC 8001 Arnold Drive Brooks AFB, TX 78235-5363	(210) 536-5281	phunter@afceeb1.brooks.af.mil
LT Maryann Jenner	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 538-5688	
Mr. Alex Johnson	Alex Johnson SM/ALC/EMR 5050 Dudley Blvd., Ste 3 McClellan AFB, CA 95652-1389	(916) 643-0830	ajohnson@SM0249.McClellan.af.mil
Mr. Eddie Johnson	USAE District, Chicago 111 North Canal St. Chicago, IL 60606-7205	(312) 353-6523	
Mr. Yohannes Kayir	Naval Air Station Pensacola Code 422K 310 John Tower Road Pensacola, FL 32508-5303	(904) 452-4315	

(Sheet 12 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Mr. Timothy Kelleher	USAE District, Chicago CENCC-ED-P 111 North Canal St. Chicago, IL 60606-7206	(312) 353-6523	
Ms. Rebecca Kemp	Rebecca Kemp U.S. EPA Region IV 345 Courtland Street NE Atlanta, GA 30365	(404) 347-3402	
Mr. Ed Ketchum	USAE District, Sacramento CESPK-ED-E 1325 J. Street Sacramento, CA 95814-2922	(916) 557-5383	
Mr. Paul Kip	Marine Corps Air Ground Combat Center Bldg 1451 GIS/Remote Sensing Lab MCAGCC Box 788110 29 Palms, CA 92278-8110	(619) 830-7641	otis_diehik@pandleton.usmc.mil
Mr. Tracy C. Kissler	HQ AF Center for Environmental Excellence HQ AFCEE/ECF 8001 Arnold Drive Brooks AFB, TX 78235-5363	(210) 536-4204	tkissler@afceeb1.brooks.af.mil
Ms. Karen Kivela	HQ AF Center for Environmental Excellence HQ AFCEE/EP 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-4191	kkivela@afceeb1.brooks.af.mil
Mr. Emil Klawitter	NAVFACENCOM, Northern Division Code 18 10 Industrial Hwy., M.S. 82 Lester, PA 19113	(610) 595-0567	eeklawitter@efdnorth.navfac.navy.mil
Mr. Karl Kneeling	Karl Kneeling 30 CES/CEVP 806 13th St., Bldg 7013, Suite 116 Vandenberg AFB, CA 93437	(805) 734-8232	

(Sheet 13 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Ms. Trudy Knutson	USAE District, Los Angeles CESPL-PM P.O. Box 2711 Los Angeles, CA 90053-2325	(213) 894-6388	
Mr. Noel Kohl	Noel Kohl U.S. EPA Region V 230 South Dearborn St. Chicago, IL 60604	(312) 886-6224	
Mr. Jon Kragt	USAE District, Omaha CEMRO-ED-GD 215 North 17th Street Omaha, NE 68102-4978	(402) 221-4614	jkragt@gismaster.mro.usace.army.mil
Mr. Bob Kraszewski	Bob Kraszewski AFFTC/EM 70 N Wolfe Ave Edwards AFB, CA 93524-6225	(805) 277-1448	kraszewb%em@mhs.dian.af.mil
Mr. David A Krooks	USACERL CEGER-PL-N P.O. Box 9005 Champaign IL 61826-9005	(217) 352-6511	kkrooks@brax.cecer.army.mil
Mr. Christopher Kyburg	NAVFACENGCOM Southwest Div Code 1852 CK 1220 Pacific Hwy San Diego, CA 92132	(619) 532-1998	
Mr. Norman T. Lew	NAVFACENGCOM, EFA Code 18124 San Bruno, CA	(415) 244-2599	
Mr. Thomas A Lightcap	USAE District, Mobile CESAM-EN-GH P.O. Box 2288 Mobile, AL 36628-0001	(334) 694-3600	Thomas.A.Lightcap@usace.army.mil

(Sheet 14 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Mr. Robert Lopez	HQ AF Center for Environmental Excellence HQ AFCEE/ECM 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3751	
Mr. Bill Lopp	Bill Lopp HQ AETC/CEVR 266 F Street, West, Bldg. 901 Randolph AFB, TX 78150-4321		loppb@hqce.aetc.af.mil
Mr. Robin Lovell	Robin Lovell HQ AFCEE/ECM 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-5399	lovell@irpims.brooks.af.mil
Mr. Mike MacDougall	Mike MacDougall U.S. EPA Region I JFK Federal Building, Rm 2203 Boston, MA 02203	(617) 565-3377	
Mr. Lawrence V. Mann	USAE District, Seattle CENPS-EN-GT P.O. Box 3755 Seattle, WA 98124-2255	(206) 764-6737	lawrence.v.mann@nps.usace.army.mil
Mr. Richard Manning	Richard Manning Fort Bliss P.O. Box 6527 Ft. Bliss, TX 79906	(915) 568-3804	rich@bliss-env1.army.mil
Mr. Kamel A. Mardini	Kamel A. Mardini ASC/EM(AFP4) 1801 Tenth St., Ste. 2 Wright-Patterson AFB, OH 45433	(513) 255-7716	Mardini@emsmtp.wpafb.af.mil
Ms. Peg Margosian	Avon Park Air Force Range Attn: Peg Margosian 29 South Blvd. Avon Park, FL 33825	(941) 452-4191	

(Sheet 15 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Ms. Gloria Markovzci	USAE District, Memphis, CELMM B-202 Federal Building 167 N. Main Street Memphis, TN 38103-1894	(901) 544-3857	markovzcg@smtp.lmm.usace.army.mil
Ms. Mary Martin	USAE District, Chicago CENCC_PD 111 N. Canal St. Chicago, IL 60606-7206	(312) 353-6400	mary.martin@smtp.ncd.usace.army.mil
Mr. Paul Mason	USAE District, Wilmington CESAW-EP-EE P.O. Box 1890 Wilmington, NC 28402-1890	(910) 251-4789	paul.j.mason@usace.army.mil
Mr. Bob Mawhinney	USAE Division, Atlantic CENAD-PP-M 90 Church St. New York, NY 10007-2979	(212) 264-7142	
Mr. Ira May	U.S. Army Environmental Center Bldg. E4480 Aberdeen Proving, MD 21010-5401	(410) 671-1522	imay@aec1.apgea.army.mil
Mr. John S. Mayhew	NAVFACENGCOM, Northern Division Attn: John S. Mayhew 10 Industrial Highway, Mail Stop #82 Lester, PA 19113-2090	(610) 595-0567	
Mr. Jeffrey McCann	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3719	
Mr. Boyd McClellan	USAE District, Louisville CEORL P.O. Box 59 Louisville, KY 40201-0059	(502) 582-5661	boyd.k.mcclellan@smtp.orl.usace.army.mil

(Sheet 16 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Mr. Anthony L Mei	USAE Division, South Pacific CESPD-PM-R 630 Sansome Street, Rm 720 San Francisco, CA 94111-2206	(415) 705-1468	
Mr. J. Wayne Mello	USAE Division, Ohio River CEORD-DL-MS P.O. Box 1159 Cincinnati, OH 45201-1159	(513) 684-5249	
CA Cindy Menches	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3808	
Mr. William Merte	USAE District, Detroit CENCE-ED-D P.O. Box 1027 Detroit, MI 48231-1027	(313) 226-3096	
Mr. Mike Metro	USAE District, Sacramento CESPK-PM 1325 J Street Sacramento, CA 95814-2922	(916) 557-7803	
Mr. Scott Milhouse	USAE Division, Huntsville CEHNZ-ED-CS-D P.O. Box 1600 Huntsville, AL 35807-4301	(205) 895-1607	milhouses@smp.hnd.usace.army.mil
Mr. Robert Monson	USAE District, Seattle CENPS-PM P.O. Box 3755 Seattle, WA 98124-2255	(206) 764-6587	
Mr. Dan Mooney	HQ AF Center for Environmental Excellence HQ AFCEE/ECM 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3839	

(Sheet 17 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Mr. Bob Moore	Bob Moore ACC-CES/ESV 129 Andrews St., Ste 102 Langley AFB, VA 23665-2769		
Ms. Margaret Morehead	USAE District, Little Rock CESWL-PM-M P.O. Box 867 Little Rock, AR 72203-0867	(501) 324-5607	
Ms. Deb Morrissey	USAE District, Omaha	(703) 325-7682	
Mr. William F Mullen	NAVFACENGCOM Atlantic Division Attn: Code 18323 1510 Gilbert Street Norfolk, VA 23511-2699	(757) 322-4588	mullenwf@efdlant.navy.mil
Mr. Bill Myers	HQ AF Center for Environmental Excellence HQ AFCEE/IEP 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3860	
Mr. Jorge Nadal	USAE District, Norfolk CENAO-PM-E 803 Front St. Norfolk, VA 23510-1096	(804) 441-7069	
Mr. Bob Nore	USAE Division, Huntsville CEHND-OE-MC P.O. Box 1600 Huntsville, AL 35807-4301	(205) 895-1507	
Mr. David Nusz	USAE Division, Missouri River CEMRD-PM-H 12565 West Center Rd Omaha, NE 68144	(402) 697-2523	

(Sheet 18 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Ms. Celia Orgel	USAE Division, Atlantic CENAD-PP-S 90 Church St. New York, NY 10007-2979	(212) 264-7175	
Mr. Joel Pai	NAVFACENGCOM, Pacific Division Code 04G Pearl Harbor, HI 96860	(808) 474-5323	jpai@efdpac.navy.mil
Mr. David Parrish	David Parrish U.S. EPA Region VI 6E-SA 1445 Ross Avenue Dallas, TX 75202-2733	(214) 665-8352	
Mr. Ray Peterson	Ray Peterson U.S. EPA Region X ES-097 1200 6th Avenue Seattle, WA 98101	(206) 553-1682	
Mr. Tom Phillips	USAE District, New Orleans CELMN-PP P.O. Box 60267 New Orleans, LA 70160-0267	(504) 862-1078	
Mr. Ray Pilon	USAE District, Buffalo GENCB-PE-PT 1776 Niagara Street Buffalo, NY 14207-3199	(716) 879-4146	
Mr. Larry Poindexter	USAE District, New Orleans CELMN-PP P.O. Box 60267 New Orleans, LA 70160-0267	(504) 862-2937	
Mr. Jimmy Reaves	USAE District, Mobile CESAM-EN-MS P.O. Box 2288 Mobile, AL 36628-0001	(334) 690-2702	jimmy.w.reaves@sam.usace.army.mil

(Sheet 19 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Mr. Randall Redeen	USAE District, Sacramento CESPK-ED-E 1325 J. Street Sacramento, CA 95814-2922	(916) 557-6616	
Mr. Robert Reynolds	HQ AF Center for Environmental Excellence HQ AFCEE/ECM 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3805	
Mr. Tony Riccio	USAE Division, New England CENED-ED-EH 424 Trapelo Road Waltham, MA 02254-9149	(617) 647-8605	
Mr. Brandy Riche	Public Works Attn: AFZH-DEQ MSRE Box 339500 Fort Lewis, WA 98433-9500	(206) 967-4985	
Mr. Paul Riederer	Paul Riederer U.S. EPA Region VIII 8PM-SIDI 999 18th Street, Ste 500 Denver, CO 80202-2405	(303) 312-6635	
Ms Julio Roldan	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3819	
Mr. David Roulo	USAE District, Savannah CESAS-PM-H P.O. Box 889 Savannah, GA 31402-0889	(912) 652-5945	
Mr. Ron Santos	USAE District, Baltimore CENAB-PL-RB P.O. Box 1715 Baltimore, MD 21203-1715	(410) 962-4996	ronald.t.santos@ccmail.nab.usace.army.mil

(Sheet 20 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)

Name	Mailing Address	Phone Number	Email Address
Mr. Frank Schaeffer	USAE District, Philadelphia CENAP 2nd & Chestnut Streets Philadelphia, PA 19106-2991	(215) 656-6550	
Mr. Donald Schinder	USAE Division, Pacific CENPD-PM-MP P.O. Box 2870 Portland, OR 97208-2870	(503) 326-5317	
Mr. Richard Scott	Fort Chaffee ATZR-ZE Fort Chaffee AZ	(501) 484-2231	
Mr. Michael G Scoville	USAE District, Fort Worth CESWF-ED-E P.O. Box 17300 Fort Worth, TX 76102-0300	(817) 334-2319	scoville_m@swf01.usace.army.mil
Mr. David Sills	USAE Division, Lower Mississippi Valley CELMV-DP-P P.O. Box 80 Vicksburg, MS 39180	(601) 634-5026	
Mr. Harvey Simon	Harvey Simon U.S. EPA Region II 290 Broadway New York, NY 10007	(212) 637-3592	
Mr. Buddy Smith	HQ AF Center for Environmental Excellence HQ AFCEE/ECA 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-6658	
Mr. Gregory Smith	USAE District, Alaska CENPA-PM-R P.O. Box 898 Anchorage, AK 99506-0898	(907) 753-5793	

(Sheet 21 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)

Name	Mailing Address	Phone Number	Email Address
Mr. Daniel Spellman	USAE Division, Ohio River CEORD-DL-MS P.O. Box 1159 Cincinnati, OH 45201-1159	(513) 684-6210	
Mr. Gerald Stalder	USAE Division, North Central CENCD-PP-PM 111 North Canal St. Chicago, IL 60606	(312) 353-1727	
Mr. Kirk Stevens	USAE District, Norfolk CENAO-PM-E 803 Front St. Norfolk, VA 23510-1096	(804) 441-7647	
Mr. Charles E. Stevenson	USAE District, Pittsburgh William S. Moorhead Federal Building 1000 Liberty Avenue Pittsburgh, PA 15222-4186	(412) 644-4123	charles.e.stevenson@usace.army.mil
Mr. Carl Stoltz	Environmental Restoration HQ AMC/CEVR P40W, 507 A Street Scott AFB, IL 62225-5022	(618) 256-5764	stoltzc@hq.amc.safb.af.mil
Mr. Rick Suever	USAE Division, Huntsville CEHND-OE-PM P.O. Box 1600 Huntsville, AL 35807-4301	(205) 895-1460	
Ms. Helene Takemoto	USAE Division, Pacific Ocean CEPOD-ET-ES Bldg 230 Ft. Shafter, HI 96858-5440	(808) 438-6931	
Mr. Richard Tomlinson	USAE District, Galveston CESWG-PM-J P.O. Box 1229 Galveston, TX 77553-1229	(409) 766-3917	

(Sheet 22 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)			
Name	Mailing Address	Phone Number	Email Address
Mr. Ricky Truluck	USAE District, Savannah CESAS-EN-EC P.O. Box 889 Savannah, GA 28402-1890	(912) 652-5521	richard.i.truluck@sas02.usace.army.mil
TS Randy C. Vanslambrouck	Air force Headquarters, Europe Europe		vanslamr@usafe22.ramstein.af.mil
Bela Varga	NAVFAC EFA NWEST Code 185BV 19917 - 7th Ave. NE Poulsbo, WA 98370-7570	(360) 396-0050	bvarga@efanw.navfac.navy.mil
Mr. Jim Vassar	USAE District, Huntington CEORH-ED-DA 502 8th Street Huntington, WV 25701-2070	(304) 529-5208	jimv@mail.orth.usace.army.mil
Mr. John Vento	USAE District, Kansas City CEMRK-MD-H 700 Federal Building Kansas City, MO 64106-2896	(816) 426-2671	
Mr. Chris Waagen	Intergraph Federal Systems	(703) 264-5734	
Mr. Todd Wager	Todd Wager Maxtovmauer 58 90403 Nuvenberg, Germany		
Mr. Doug Wall	USAE District, Wilmington CESAW-EP P.O. Box 1890 Wilmington, NC 28402-1890	(910) 251-4440	doug.wall@usace.army.mil
Mr. David L. Wallace	USAE District, Vicksburg CELMV-ED-DR 2101 N. Frontage Road Vicksburg, MS 39180-5191	(601) 631-5981	b4edhdw@smlp.lmk.usace.army.mil

(Sheet 23 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Continued)

Name	Mailing Address	Phone Number	Email Address
Mr. Robert F. Warda	USAE Division, North Central CENCD-PE-ED-TE 111 North Canal St. Chicago, IL 60606	(312) 353-3679	
Mr. Mike Watson	Mike Watson USACOE CEMRO-ED-EG 213 N. 17th St. Omaha, NE 68102-4978	(402) 221-7747	
Ms Julie Werder	Manchester Fuel Department P.O. Box 8 Manchester, WA 98353	(360) 476-2145	julie_werder@fmso.navy.mil
Mr. David West	David West U.S. EPA Region III 3PM53 841 Chestnut Building Philadelphia, PA 19107	(215) 597-1198	
Mr. Royce West	USAE District, Little Rock CESWL-ED-DA P.O. Box 867 Little Rock, AR 72203-0867	(501) 324-5288	royce@venus.swl.usace.army.mil
CA Tedd Wheeler	USAE District, Baltimore P.O. Box 1715 Baltimore, MD 21203-1715	(410) 962-6782	
Mr. Ronald D. White	USAE District, Walla Walla CENPW-EN-EE 201 N. Third Ave. Walla Walla, WA 99362-1876	(509) 527-7591	Ronald.D.White@NPW01.usace.army.mil
LtC James Williams HQ	AF Center for Environmental Excellence HQ AFCEE/ECM 3207 North Road Brooks AFB, TX 78235-5363	(210) 536-3857	

(Sheet 24 of 25)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Name (Concluded)

Name	Mailing Address	Phone Number	Email Address
Mr. Eric G. Woerner	USAE District, Vicksburg CELMK-ED-GT 3550 I-20 Frontage Rd. Vicksburg, MS 39180-5191	(601) 631-7211	baedfew3@smtp.lmk.usace.army.mil
Mr. Frank Wolzen	USAE District, Baltimore CENAB-PP-E P.O. Box 1715 Baltimore, MD 21203-1715	(410) 962-2778	
Mr. Richard Young	USAE District, CENPW-EN-EE Building 602, City-County Airport Walla Walla, WA 99362-9265	Walla Walla	
Mr. Roger Young	USAE Division, Huntsville CEHNZ-ED-CS-D P.O. Box 1600 Huntsville, AL 35807-4301	(205) 895-1629	youngr@smtp.hnd.usace.army.mil
Mr. Logos Yuen	Logos Yuen AFCOE/ERC 8001 Arnold Dr., Bldg 642/R22 Brooks AFB, TX 78235	(210) 536-4170	myuen@afceeb1.brooks.af.mil

(Sheet 25 of 25)

Appendix C

Points-of-Contact - Alphabetical Listing by Installation/Office Name

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	Todd		Wager		(Germany)				
Mr.	Jerry		Cleaver		AF Base Conversion Agency	Environmental Div.		(703) 696-5539	jcleaver(space)@(space)afbda1.hq.af.mil
Tsgt.	Randy	C.	Vanslambrouck		Air Force Headquarters Europe				vanslamr@usafe22.ramstein.af.mil
Ms.	Peg		Margosian		Avon Park Air Force Range			(941) 452-4191	
Mr.	Bob		Furlong		Bolling AFB	HQ USAF/CEVR			furlong@cevr.pent.afce
Mr.	Phil		Hunter		Brooks AFB		AFCEE/ERC	(210) 536-5281	
Ms.	Sandra		Fechner		Brooks AFB			(210) 536-3420	sfechner@afceeb1.brooks.af.mil
Mr.	Robin		Lovell		Brooks AFB			(210) 536-5399	lovell@irpims.brooks.af.mil
Mr.	Logos		Yuen		Brooks AFB		AFCEE/ERC	(210) 536-4170	myuen@afceeb1.brooks.af.mil
Ms.	Beth		Garland		Brooks AFB		AFCEE/ERC	(210) 536-5658	
LT. COL.	Darrel		Cornell		Brooks AFB		AFCEE/ERC	(210) 536-5282	
Mr.	Tom		Brent		Crane Naval Weapons Support Center			(812) 854-6160	
Ms.	Barbara		Bedford		Edwards AFB		AFFTC/EM	(805) 277-1458	bedfordb%cm@mhs.elan.af.mil
Ms.	Rebecca		Hobbs		Edwards AFB		AFFTC/EM	(805) 277-1409	Hobbsr%em@mhs.elan.af.mil
Mr.	Bob		Kraszewski		Edwards AFB		AFFTC/EM	(805) 277-1448	kraszewb%em@mhs.dlan.af.mil

(Sheet 1 of 18)

(Sheet 1 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	Mike		MacDougall		EPA Region I	Information Management Branch		(617) 565-3377	
Mr.	Harvey		Simon		EPA Region II			(212) 637-3592	
Mr.	David		West		EPA Region III	Program and Applications Support Section	3PM53	(215) 597-1198	
Ms.	Rebecca		Kemp		EPA Region IV	Office of Integrated Environmental Analysis		(404) 347-3402	
Mr.	Warren		Beer		EPA Region IX		P-5-2	(415) 744-1803	
Mr.	Noel		Kohl		EPA Region V	GIS Management Office/ESD		(312) 886-6224	
Mr.	David		Parrish		EPA Region VI		6E-SA	(214) 665-8352	
Ms.	Vickie		Damm		EPA Region VII	Integrated Environmental Analysis Section		(913) 551-7247	
Mr.	Paul		Riederer		EPA Region VIII		8PM-SIDI	(303) 312-6635	
Mr.	Ray		Peterson		EPA Region X	Quality Assurance and Data Management	ES-097	(206) 553-1682	
Mr.	Richard		Manning		Fort Bliss	Directorate of Environment		(915) 568-3804	rich@bliss-env1.army.mil
Mr.	Richard		Scott		Fort Chaffee	Information Management	ATZR-ZE	(501) 484-2231	

(Sheet 2 of 18)

(Sheet 2 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Ms.	Carol		Cady		Fort Drum			(315) 772-4852	
Mr.	Brandy		Riche		Fort Lewis	Public Works	AFZH-DEQ MSRE	(206) 967-4985	
Mr.	Bill		Grannis		Hickam AFB		15 CES/CEVR	(808) 449-9073	
Mr.	George		Fujimoto		Hickam AFB		HQ PACAF/ CEVR	(808) 448-0470	
Mr	Mark		Holt		Hill AFB	Environmental Branch	OO-ALC/EMR	(801) 777-3684	holtm@hillwpos.hill.af.mil
Mr.	Philip	M.	Hunter		HQ Air Force Center for Environmental Excellence	Consultant Operations Division	HQ AFCEE/ERC	(210) 536-5281	phunter@afceeb1.brooks. af.mil
Mr.	J. Dale		Clark		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-3668	
Mr.	Buddy		Smith		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-6658	
Ms.	Julio		Roldan		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-3819	
Mr.	Jeffrey		McCann		HQ Air Force Center for Environmental	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-3719	

(Sheet 3 of 18)

(Sheet 3 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
CAPT.	Cindy		Menches		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-3806	
Ms.	Margaret		Harris		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-5649	
Mr.	Mark		Goodwin		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-5480	
Mr.	Terry		Edwards		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-5478	
CAPT.	Robert		Cantwell		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-4202	
Mr.	Jonathan		Farthing		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-3787	
Ms.	Tanya		Banks		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-4182	
Mr.	Charles		Brown		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-4203	

(Sheet 4 of 18)

(Sheet 4 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
L.T.	Maryann		Jenner		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-5688	
MAJ.	Donald		Gleason		HQ Air Force Center for Environmental Excellence	Environmental Analysis	HQ AFCEE/ ECA	(210) 536-6417	
COL.	Thomas		Gross		HQ Air Force Center for Environmental Excellence	Environmental Conservation and Planning	HQ AFCEE/EC	(210) 536-3869	
Mr.	Bill		Myers		HQ Air Force Center for Environmental Excellence	Environmental Planning	HQ AFCEE/ ECP	(210) 536-3860	
Mr.	Tracy	C.	Kissler		HQ Air Force Center for Environmental Excellence	Environmental Planning Division	HQ AFCEE/ ECP	(210) 536-4204	tkissler@afceeb1.brooks. af.mil
Ms.	Nancy		Carper		HQ Air Force Center for Environmental Excellence	Pollution Prevention	HQ AFCEE/EP	(210) 536-4964	
COL.	Patrick		Fink		HQ Air Force Center for Environmental Excellence	Pollution Prevention	HQ AFCEE/EP	(210) 536-3332	
Ms.	Karen		Kivela		HQ Air Force Center for Environmental Excellence	Pollution Prevention Directorate	HQ AFCEE/EP	(210) 536-4191	kkivela@afceeb1.brooks. af.mil

(Sheet 5 of 18)

(Sheet 5 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)

Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	Dan		Mooney		HQ Air Force Center for Environmental Excellence	Program Management	HQ AFCEE/ ECM	(210) 536-3839	
Mr.	Robert		Lopez		HQ Air Force Center for Environmental Excellence	Program Management	HQ AFCEE/ ECM	(210) 536-3751	
CAPT.	John		Enyeart		HQ Air Force Center for Environmental Excellence	Program Management	HQ AFCEE/ ECM	(210) 536-5632	
LT.	Cathy		Crawford		HQ Air Force Center for Environmental Excellence	Program Management	HQ AFCEE/ ECM	(210) 536-3381	
LT. COL.	James		Williams	III	HQ Air Force Center for Environmental Excellence	Program Management	HQ AFCEE/ ECM	(210) 536-3857	
Mr.	Robert		Reynolds		HQ Air Force Center for Environmental Excellence	Program Management	HQ AFCEE/ECM	(210) 536-3805	
Mr.	Chris		Waagen		Intergraph Fed- eral Systems			(703) 264-5734	
Mr.	John	R.	Clayton		Intergraph Ser- vices Company			(703) 753-2658	
Mr.	Bob		Moore		Langley AFB		ACC-CES/ESV		

(Sheet 6 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Ms.	Sandra		Elliott		Langley AFB		ACC/CES/ESV	(804) 764-3614	
Ms.	Julie		Werder		Manchester Fuel Department			(360) 476-2145	julie_werder@fmso.navy.mil
Mr.	Paul		Kip		Marine Corps Air Ground Combat Center	GIS/Remote Sensing Lab		(619) 830-7641	otis_diehik@pendleton.usmc.mil
Mr.	Pat		Christman		McClellan AFB		SM/ALC/EMR	(916) 643-0830	
Mr.	Alex		Johnson		McClellan AFB	Tech Info Systems	SM-ALC/EMR	(916) 643-0830	ajohnson@SM0249.McClellan.af.mil
Mr.	Greg		Bury		Lakehurst Naval Air Engineering Station	Environmental	843230B5-2	(908) 323-1014	buryg@lakehurst.navy.mil
Mr.	Yohannes		Kayir		Naval Air Station Pensacola		Code 422K	(904) 452-4315	
no	Bela		Varga		NAVFAC EFA NWEST	Environmental Management Systems	Code 185BV	(360) 396-0050	bvarga@efanw.navy.mil
Mr.	Turner		Cole		NAVFACENGCOM, Division		Code 20G	(804) 322-4896	coletf@efdiant.navy.mil
Mr.	William	F.	Mullen		NAVFACENGCOM, Atlantic Division	Environmental Quality Division	Code 18323	(757) 322-4588	mullenwf@efdiant.navy.mil
Mr.	Norman	T.	Lew		NAVFACENGCOM, Engineering Field Activity		Code 18124	(415) 244-2599	
Mr.	Steven	C.	Gonzales		NAVFACENGCOM, HQ	Environmental Operations Division	Code 42	(703) 325-0356	scgonzales@hq.navy.mil

(Sheet 7 of 18)

(Sheet 7 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	John	S.	Mayhew		NAVFACENGCOM, Northern Division			(610) 595-0567	
Mr.	Emil		Klawitter		NAVFACENGCOM, Northern Division	Environmental	Code 18	(610) 595-0567	eeklawitter@efdnorth. navfac.navy.mil
Mr.	Joel		Pai		NAVFACENGCOM, Pacific Division	Engineering Systems	Code 04G	(808) 474-5323	jpai@efdpac.navy.mil
Mr.	Wayne		Abrigo		NAVFACENGCOM, Pacific Division	Engineering Systems	Code 04G	(808) 474-5324	wabugo@efdpac.navy.mil
Mr.	Reese		Batten		NAVFACENGCOM, Southern Division	Environmental	Code 18	(803) 820-5578	erbatten@efdsouth. navfac.navy.mil
Mr.	Christopher		Kyburg		NAVFACENGCOM, Southwest Division	Environmental	Code 1852 CK	(619) 532-1998	
Mr.	Mike		Watson		Omaha USACOE	CEMRO-ED-EG		(402) 221-7747	
Mr.	Charles		Becker		Pine Bluff Arsenal			(501) 540-2834	loppb@hqce.aetc.af.mil
Mr.	Bill		Lopp		Randolph AFB		HQ AETC/CEVR		
Mr.	Tim		Corbett		Scott AFB		HQ AMC/CEVR	(618) 256-8343	
Mr.	Carl		Stoltz		Scott AFB	Environmental Restoration	HQ AMC/CEVR	(618) 256-5764	stoltzc@hq.amc.safb.af.mil
Mr.	Joseph		Cecrle		Tinker AFB		OC-ALC/EMR	(405) 734-3058	jcecrle@p025.tinker.af.mil
Ms.	Victoria	L.	Cwierthie		U.S. Army Aberdeen Proving Ground		STEAP-SH-ER	(410) 278-6756	
Mr.	Ira		May		U.S. Army Envi- ronmental Center	Geology and Chemistry Branch		(410) 671-1522	imay@aec1.apgea.army.mil
(Sheet 8 of 18)									

(Sheet 8 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	David	A.	Krooks		USAE Construction Engineering Center	Planning & Management Laboratory/Env.	CECER-PL-N	(217) 352-6511	krooks@lbrax.cecer. army.mil
Mr.	Gregory		Smith		USAE District, Alaska		CENPA-PM-R	(907) 753-5793	
Ms.	Catherine		Holland		USAE District, Alaska	Engineering Branch	CENPA-EN	(907) 753-2664	catherine.e.holland@usae. army.mil
Mr.	Cherly		Buckel		USAE District, Albuquerque		CESWA-PP-M	(505) 254-3208	
Mr.	Frank		Wolzen		USAE District, Baltimore		CENAB-PP-E	(410) 962-2778	
Mr.	Glenn		Earhart		USAE District, Baltimore		CENAB-PP-E	(410) 962-6113	
CAPT.	Tedd		Wheeler		USAE District, Baltimore	Civil & HTRW Section		(410) 962-6782	
Mr.	Ron		Santos		USAE District, Baltimore	Planning	CENAB-PL-RB	(410) 962-4996	ronald.t.santos@ccmail. nab.usae.army.mil
Ms.	Sheila		Bloom		USAE District, Baltimore	Project Management	CENAB-PP-E	(410) 962-6782	
Mr.	Clinton	L.	Anuszewski		USAE District, Baltimore	Remedial, Investigation, & Design (RID) Section	CENAB-EN-HT	(410) 962-4454	
Mr.	Fred		Baglione		USAE District, Buffalo		CENCB-PE-EA	(716) 879-4418	
Mr.	Ray		Pilon		USAE District, Buffalo		CENCB-PE-PT	(716) 879-4146	
Mr.	Lincoln		Blake		USAE District, Charleston		CESACP-MS	(803) 727-4343	

(Sheet 9 of 18)

(Sheet 9 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	Timothy		Kelleher		USAE District, Chicago		CENCC-ED-P	(312) 353-6523	
Ms.	Mary		Martin		USAE District, Chicago		CENCC-PD	(312) 353-6400	mary.martin@smtp.ncd.usace.army.mil
Mr.	Eddie		Johnson		USAE District, Chicago		CENCC-ED-P	(312) 353-6523	
Mr.	William		Merte		USAE District, Detroit		CENCE-ED-D	(313) 226-3096	
Mr.	Roger		Gauthier		USAE District, Detroit	Engineering: Hydrology	CENCE-EP-HG	(313) 226-3054	gauthier@great_lakes.net
Mr.	Calvin		Conder		USAE District, Fort Worth		CESWF-PM-J	(817) 774-2719	
Mr.	Michael	G.	Scoville		USAE District, Fort Worth	Environmental Design Branch	CESWF-ED-E	(817) 334-2319	scoville_m@swf01.usace.army.mil
Mr.	Richard		Tomlinson		USAE District, Galveston	Project Management	CESWG-PM-J	(409) 766-3917	
Mr.	Wayne		Budrus		USAE District, Huntington		CEORH-DL-M	(304) 529-5507	
Mr.	Jim		Vassar		USAE District, Huntington	Engineering Division	CEORH-ED-DA	(304) 529-5208	jimv@mail.orh.usace.army.mil
Mr.	Bill		Craven		USAE District, Huntsville			(205) 895-1612	
Mr.	Wayne		Galloway		USAE District, Huntsville		CEHND-OE-ES	(205) 895-1582	
Mr.	Robert		Bridgers		USAE District, Jacksonville		CESAJ-DP	(904) 232-3085	
(Sheet 10 of 18)									

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)

Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	John		Vento		USAE District, Kansas City		CEMRK-MD-H	(816) 426-2671	
Mr.	Neil		Fehr		USAE District, Kansas City	Engineering: Environmental Branch	CEMRK-EP-EP	(816) 426-5535	neil.fehr@mrk01.usace.army.mil
Ms.	Margaret		Morehead		USAE District, Little Rock		CESWL-PM-M	(501) 324-5607	
Mr.	Royce		West		USAE District, Little Rock	Engineering Division	CESWL-ED-DA	(501) 324-5268	royce@venus.swl.usace.army.mil
Mr.	Steve		Corley		USAE District, Little Rock	Engineering Division	CESWL-ED-ED	(501) 324-5710	steve.c.corley@usace.army.mil
Mr.	Max		Frauenthal		USAE District, Little Rock	Geotechnical Branch	CESWL-ED-G	(501) 324-5888	max.frauenthal@swl01.usace.army.mil
Ms.	Trish		Anslow		USAE District, Little Rock	Planning & Management	CESWL-PL-A	(501) 324-5836	trish@enviro.swl.usace.army.mil
Ms.	Trudy		Knutson		USAE District, Los Angeles		CESPL-PM	(213) 894-6388	
Mr.	Gary		Chisholm		USAE District, Louisville		CEORL-DL-B	(502) 625-7010	
Mr.	Boyd		McClellan		USAE District, Louisville	Survey & Mapping	CEORL	(502) 582-5661	boyd.k.mcclellan@smtp.orl.usace.army.mil
Ms.	Gloria		Markovzci		USAE District, Memphis	Planning Division	CELMM	(901) 544-3857	markovzci@smtp.lmm.usace.army.mil
Maj.	Max		Hughey		USAE District, Mobile		CESAM-PM-SP	(334) 694-4634	

(Sheet 11 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)

Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	Jimmy	W.	Reaves		USAE District, Mobile	GIS, Survey, & Photogram- metry Section	CESAM-EN-MS	(334) 690-2702	jimmy.w.reaves@sam. usace.army.mil
Mr.	Thomas	A.	Lightcap		USAE District, Mobile	Hazardous & Environmental Support	CESAM-EN-GH	(334) 694-3600	Thomas.A.Lightcap@ usace.army.mil
Ms.	Linda		Hejazi		USAE District, Nashville		GEORN-ER-M	(615) 736-5966	
Mr.	Tom		Phillips		USAE District, New Orleans		CELMN-PP	(504) 862-1078	
Mr.	Larry		Poindexter		USAE District, New Orleans		CELMN-PP	(504) 862-2937	
Mr.	James		Flock		USAE District, New Orleans	Design Ser- vice Branch	CELMN-ED-S	(504) 862-2565	james.flock@mail.usace. army.mil
Mr.	Dave		Brauwer		USAE District, New York		CENAN-PP-E	(908) 435-0079	
Mr.	Jorge		Nadal		USAE District, Norfolk		CENAO-PM-E	(804) 441-7069	
Ms.	Deb		Morrissey		USAE District, Omaha			(703) 325-7682	
Mr.	Stan		Bauer		USAE District, Omaha		CEMRO-MD-HB	(402) 221-7831	
Mr.	Bob		Dworkin		USAE District, Omaha			(703) 325-7716	
Mr.	Sam		Bass		USAE District, Omaha	Geoenviron- mental Branch	CEMRO-HX-G	(402) 697-2654	don.b.bass@mrd01. usace.army.mil

(Sheet 12 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	Jon		Kragt		USAE District, Omaha	Survey	CEMRO-ED-GD	(402) 221-4614	jkragt@gismaster.mro. usace.army.mil
Mr.	Frank		Schaeffer		USAE District, Philadelphia		CENAP	(215) 656-6550	
Mr.	Charles	E.	Stevenson		USAE District, Pittsburgh	Geotechnical Branch	CEORP-ED-G	(412) 644-4123	charles.e.stevenson@ usace.army.mil
Mr.	Mike		Gross		USAE District, Portland	Project Management	CENPP-PE-DC	(503) 326-6489	
Mr.	Thomas	M.	DeWitte		USAE District, Rock Island			(309) 794-6153	
Mr.	Kevin		Anderson		USAE District, Rock Island	Planning Section	CENCR-PD-W	(309) 794-5586	kevin.l.anderson@ncrmail. ncr.usace.army.mil
Mr.	Phil		Grossack		USAE District, Sacramento	CADD	CESPK-ED-EH	(916) 557-7630	
Mr.	Randall		Redeen		USAE District, Sacramento	Environmental Engineering Branch	CESPK-ED-E	(916) 557-6616	
Mr.	Ed		Ketchum		USAE District, Sacramento	Environmental Engineering Section	CESPK-ED-E	(916) 557-5383	
Mr.	Mike		Metro		USAE District, Sacramento		CESPK-PM	(916) 557-7803	
Mr.	John		Hess		USAE District, Sacramento	Geology		(916) 557-7625	
Mr.	David		Roulo		USAE District, Savannah		CESAS-PM-H	(912) 652-5945	

(Sheet 13 of 18)

(Sheet 13 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	Ricky		Truluck		USAE District, Savannah	Spatial Engineer	CESAS-EN-EC	(912) 652-5521	richard.i.truluck@sas02. usace.army.mil
Mr.	Robert		Monson		USAE District, Seattle		CENPS-PM	(206) 764-6587	
Ms.	Lori		Danielson		USAE District, Seattle		CENPS-IM-PI	(206) 764-6084	lori.d.danielson@internet. nps.usace.army
Mr.	Bruce		Higgins		USAE District, Seattle	Geotechnical & Environmental Restoration Branch	CENPS-EN-GT	(206) 764-3320	bruce.j.higgins@nps.usace. army.mil
Mr.	Lawrence	V.	Mann		USAE District, Seattle	Geotechnical & Environmental Restoration Branch	CENPS-EN-GT	(206) 764-6737	lawrence.v.mann@nps. usace.army.mil
Ms.	Lisa		Hedin		USAE District, St. Paul		CENCS-PE-M	(612) 290-5443	
Mr.	Bob		Dempsey		USAE District, St. Paul		CENCS-PE-M	(612) 290-5759	
Ms.	Sharon		Cotner		USAE District, St. Louis		CELMS-PM-M	(314) 331-8045	
Mr.	Paul		Clouse		USAE District, St. Louis	Survey	CELMS-ED	(314) 331-8390	paul.clouse@usace. army.mil
Mr.	Tom		Hendrix		USAE District, Tulsa		CESWT-PP	(918) 669-7238	
Mr.	Rob		Green		USAE District, Vicksburg	Civil & Arch- itectural Section	CELMK-ED-DR	(601) 631-5940	

(Sheet 14 of 18)

(Sheet 14 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	Steve	Farmer		USAE District, Vicksburg	Civil & Arch- itectural Section	CELMK-ED-DR	(601) 631-5561		
Mr.	David	L.	Wallace	USAE District, Vicksburg	Design Branch/ Civil Engineering Section	CELMV-ED-DR	(601) 631-5981	b4edhlw@smtplmk. usace.army.mil	
Mr.	Eric	G.	Woerner	USAE District, Vicksburg	Geotechnical Branch	CELMK-ED-GT	(601) 631-7211	baedfew3@smtplmk. usace.army.mil	
Mr.	Richard		Young	USAE District, Walla Walla		CENPW-EN-EE			
Mr.	Ronald	D.	White	USAE District, Walla Walla	Environmental Engineering Branch	CENPW-EN-EE	(509) 527-7591	Ronald.D.White@NPW01. usace.army.mil	
Mr.	Jim		Carper	USAE District, Wilmington		CESAW-PH-C	(910) 251-4670		
Mr.	Doug		Wall	USAE District, Wilmington	CADD Coordinator	CESAW-EP	(910) 251-4440	doug.wall@usace.army.mil	
Mr.	Paul		Mason	USAE District, Wilmington	Cost Engineering	CESAW-EP-EE	(910) 251-4789	paul.j.mason@usace. army.mil	
Mr.	Kirk		Stevens	USAE District, Norfolk		CENAO-PM-E	(804) 441-7647		
Mr.	Bob		Mawhinney	USAE Division, Atlantic		CENAD-PP-M	(212) 264-7142		
Ms.	Celia		Orgel	USAE Division, Atlantic		CENAD-PP-S	(212) 264-7175		
Mr.	Bob		Britton	USAE Division, Huntsville		CEHND-OE-PM	(205) 895-1545		

(Sheet 15 of 18)

(Sheet 15 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	Rick	Suever		USAE Division, Huntsville		CEHND-OE-PM	(205) 895-1460		
Mr.	Bob	Nore		USAE Division, Huntsville		CEHND-OE-MC	(205) 895-1507		
Mr.	Scott	Milhouse		USAE Division, Huntsville	Support Center	CEHNZ-ED- CS-D	(205) 895-1607	milhouses@smtp.hnd. usace.army.mil	
Mr.	Roger	Young		USAE Division, Huntsville	Support Center	CEHNZ-ED- CS-D	(205) 895-1629	youngr@smtp.hnd. usace.army.mil	
Mr.	Tony	Hunt		USAE Division, Huntsville	Support Center	CEHNZ-ED- CS-D	(205) 895-1615	huntt@smtp.hnd. usace.army.mil	
Mr.	David	Sills		USAE Division, Lower Mississippi Valley		CELMV-DP-P	(601) 634-5026		
Mr.	David	Nusz		USAE Division, Missouri River		CEMRD-PM-H	(402) 697-2523		
Mr.	Roger	Hager		USAE Division, Missouri River		CEMRD-ET-HS	(402) 697-2619		
Mr.	Tony	Riccio		USAE Division, New England		CENED-ED-EH	(617) 647-8605		
Mr.	Bill	Holtham		USAE Division, New England		CENED-PD-M	(617) 647-8670		
Mr.	Gerald	Stalder		USAE Division, North Central		CENCD-PP-PM	(312) 353-1727		
Mr.	Robert	F. Warda		USAE Division, North Central		CENCD-PE- ED-TE	(312) 353-3679		
Mr.	Moon	Y. Han		USAE Division, North Pacific		CENPD-PM-MP	(503) 326-7361		

(Sheet 16 of 18)

(Sheet 16 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	Donald		Schinder		USAE Division, North Pacific		CENPD-PM-MP	(503) 326-5317	
Mr.	Daniel		Spellman		USAE Division, Ohio River		CEORD-DL-MS	(513) 684-6210	
Mr.	J. Wayne		Mello		USAE Division, Ohio River		CEORD-DL-MS	(513) 684-6249	
Ms.	Helene		Takemoto		USAE Division, Pacific Ocean		CEPOD-ET-ES	(808) 438-6931	
Ms.	Sharon		Ernst		USAE Division, South Atlantic		CESAD-PM-M	(404) 331-2495	
Mr.	Anthony	L.	Mei		USAE Division, South Pacific		CESPD-PM-R	(415) 705-1468	
Mr.	Jim		Harrigan		USAE Division, Southwestern		CESWD-PP-M	(214) 767-2403	
Mr.	Paul		Albertson		USAE Water- ways Experi- ment Station	Engineering Geology	CEWES-GG-YG	(601) 634-3148	albertp@ex1.wes.army.mil
Dr.	J.	P.	Holland		USAE Water- ways Experi- ment Station	Hydraulics Laboratory	CEWES-HV-E	(601) 634-2644	holland@hl.wes.army.mil
Mr.	Bobby	G.	Carpenter		USAE Water- ways Experi- ment Station	Tri-Service CADD/GIS Technology Center	CEWES-ID-C	(601) 634-4572	carpenb@ex1.wes.army.mil
Mr.	Patrick	N.	Deliman		USAE Water- ways Experi- ment Station	Water Quality & Contami- nant Model- ing Branch	CEWES-ES-Q	(601) 634-3623	delimap@ex1.wes.army.mil

(Sheet 17 of 18)

(Sheet 17 of 18)

Environmental Restoration/Compliance Points-of-Contact - Alphabetical Listing by Installation (Continued)									
Prefix	First Name	Middle Initial	Last Name	Suffix	Installation/ Office Name	Office Title	Office Code	Work Phone	Email Address
Mr.	Karl		Kneeling		Vandenberg AFB		30CES/CEVP	(805) 734-8232	
Mr.	Kamel	A.	Mardini		Wright-Patterson AFB		ASC/EM(AFP4)	(513) 255-7716	Mardini@emsmtp.wpafb.af.mil
(Sheet 18 of 18)									

Appendix D

ER/EC CADD/GIS Initiatives

Installation/Office Name	Air Force Headquarters Europe
Office Title	
POC Name	Randy C. Vanslambrouck
Work Phone	
Fax Number	
Email Address	vanslamr@usafe22.ramstein.af.mil
Initiatives Name	
Initiatives Description	Setting up an Intergraph MSE GIS for three Air Force bases in Europe in TSSDS format. Have contracted to convert more than 200 maps. Environmental hazards documentation will be included in work.

Installation/Office Name	Avon Park Air Force Range
Office Title	
POC Name	Peg Margosian
Work Phone	(941) 452-4191
Fax Number	
Email Address	
Initiatives Name	
Initiatives Description	Collect information about natural resources and cultural features on range; analyze information to support or correct management of natural resources; output maps for use in field, presentation etc. Hazards, wells, and other "EC" issues comprise a small but growing section of the GIS.

Installation/Office Name Crane Naval Weapons Support Center

Office Title

POC Name Tom Brent

Work Phone (812) 854-6160

Fax Number

Email Address

Initiatives Name

Initiatives Description GIS to be used for management and interpretation of large volumes of environmental restoration data.

Installation/Office Name Edwards AFB

Office Title

POC Name Robert Kraszewski

Work Phone (805) 277-1448

Fax Number

Email Address kraszewb%em@mhs.dlan.af.mil

Initiatives Name

Initiatives Description Provide a tool for comprehensive planning including the environmental GIS coverage of the Mojave eco system.

Installation/Office Name Fort Bliss

Office Title Environment

POC Name Richard J. Manning

Work Phone (915) 568-3804

Fax Number (915) 568-6979

Email Address rich@bliss-env1.army.mil

Initiatives Name PACES

Initiatives Description Incorporating TSSDS into an ARC/INFO/Oracle database development project underway by Fort Bliss and University of El Paso's (UTEP) Computer Science's Dept. UTEP has been awarded funding from NASA for the Pan American Center of Environmental Studies (PACES) program for monitoring environmental change along the U.S./Mexican Border. Environmental changes to be monitored will involve vegetation, animal life, water quality, impact of Ft. Bliss firing range, etc.

Installation/Office Name	Fort Chaffee
Office Title	Information Management
POC Name	Richard Scott
Work Phone	(501) 484-2231
Fax Number	
Email Address	Rich@bliss-envl.army.mil
Initiatives Name	
Initiatives Description	Natural and cultural resources compliance, environmental compliance and restoration.

Installation/Office Name	Fort Drum
Office Title	
POC Name	Carol Cady
Work Phone	(315) 772-4852
Fax Number	
Email Address	
Initiatives Name	
Initiatives Description	Initiative is to provide spatial information management and cartographic support in the areas of Cultural and Natural Resources, Environmental Branch, Master Planning, and Range Control.

Installation/Office Name	Fort Lewis
Office Title	Public Works
POC Name	Brandy Riche
Work Phone	(206) 967-4985
Fax Number	
Email Address	
Initiatives Name	
Initiatives Description	GIS serves mainly the Natural/Cultural Resources and NEPA. Used to help managers make quicker, more informed decisions based on all available data.

Installation/Office Name Hickam Air Force Base

Office Title

POC Name Bill Grannis

Work Phone (808) 449-9073

Fax Number (808) 449-9723

Email Address

Initiatives Name

Initiatives Description Various CADD and GIS projects

Installation/Office Name Hill AFB

Office Title Environmental Branch

POC Name Mark Holt

Work Phone (801) 777-3684

Fax Number (801) 777-4306

Email Address holtm@hillwpos.hill.af.mil

Initiatives Name

Initiatives Description Arc-Info Sun workstation is used for natural resources, compliance, IRP, and decision making on activities.

Installation/Office Name Intergraph Federal Systems

Office Title

POC Name Chris Waagen

Work Phone (703) 264-5734

Fax Number

Email Address

Initiatives Name

Initiatives Description Intergraph hardware and software were selected by the US Army for prototype facilities management systems at Ft. Drum, NY and Ft. Knox, KY.

Installation/Office Name Intergraph Services Company

Office Title

POC Name John R. Clayton

Work Phone (703) 753-2658

Fax Number

Email Address

Initiatives Name

Initiatives Description Currently used for USACE-SWT and EFA South Div. Each project had its own unique requirements and goals, but by and large, the intent was to invest time in collecting, converting, and storing data in support of efficient day-to-day operational and analytical aspects of environmental management. That may have involved preparation for public meetings as well as reports to state and/or federal oversight agencies. In addition, support was provided at a project in a phase in which the most important aspect was to show proof of concept in order to attract the level of support necessary to bring the system to fruition and full application.

Installation/Office Name Lakehurst Naval Air Station

Office Title Environmental

POC Name Greg Bury

Work Phone (908) 323-1014

Fax Number

Email Address buryg@lakehurst.navy.mil

Initiatives Name

Initiatives Description GIS used to get all environmental data in one place, provide data accountability, automate product generation

Installation/Office Name Marine Corps Air Ground Combat Center

Office Title GIS/Remote Sensing Lab

POC Name Paul Kip

Work Phone (619) 830-7641

Fax Number (619) 830-5718

Email Address otis_diehlk@pendleton.usmc.mil

Initiatives Name Mohave Desert Eco System

Initiatives Description \$5 million project that will integrate the following factivities eco system on the Internet: China Lake, Edwards Air Force Base; MCLB Barstow; 29 Palms.

Installation/Office Name	McClellan AFB
Office Title	Tech Info Systems
POC Name	Alex Johnson
Work Phone	(916) 643-0830
Fax Number	
Email Address	
Initiatives Name	
Initiatives Description	Initiatives are categorized into three main areas: 1) Integrate data from many contractors and base; 2) provide capability for independent analysis; and 3) provide information source for EM customers.

Installation/Office Name	Naval Research and Development
Office Title	Environmental
POC Name	Gerry Key
Work Phone	(619) 533-3233
Fax Number	
Email Address	key@nosc.mil
Initiatives Name	Environmental Data Model
Initiatives Description	Forth Normal environmental data model

Installation/Office Name	NAVFACENGCOM, Atlantic Division
Office Title	
POC Name	Turner Cole
Work Phone	(804) 322-4896
Fax Number	(804) 322-4834
Email Address	coletf@efdlant.navfac.navy.mil
Initiatives Name	Maps
Initiatives Description	Pilot projects: Norfolk Naval Base, Building footprints attaching NFADB. Activity Maps: Cherry Point; Camp Lejume; Yorktown NWS Fuel Depot; Roda, Spain, Bahrain; Keflavik; Crany Island Fuel Depot; St Julian Creek Annex; Norfolk NSY, Portsmouth; NWest; Portsmouth Navl Hosp.; Little Creek; Oceana NAS; Fentress Naval Aux. Landing Field; Sabana Seca; Vieques; Roosevelt Roads; Culebra; Rodman, Panama; St Thomas; Quantanamo Bay.

Installation/Office Name	NAVFACENGCOM, Atlantic Division
Office Title	Environmental Quality Division
POC Name	William F. Mullen
Work Phone	(757) 322-4588
Fax Number	(757) 322-4805
Email Address	mullenwf@efdlant.navfac.navy.mil
Initiatives Name	
Initiatives Description	IRP projects are underway at numerous installations under jurisdiction of LANTDIV/LANTOPS. Intergraph ERMA and Tri-service Spatial Data Standards are being used as standard GIS platform.

Installation/Office Name	NAVFACENGCOM, Engineering Field Activity
Office Title	
POC Name	Norman T. Lew
Work Phone	(415) 244-2599
Fax Number	
Email Address	
Initiatives Name	Digital Format
Initiatives Description	The following activities are available in digital format: Alameda Annex Fisco; Alameda NADEP; Alameda NAS; Centerville Beach NF; China Lake NAWS; Concord NWS; Crows Landing; EFA West; Fallon NAS; Hunters Point; Lemoore NAS; Magna NIROP; Mare Island NS; Moffett Field; Monterey NPGS; Oakland FISC; Oakland NH; Port Hueneme CBC; Port Hueneme CEL; Pt Molate NFD; Pt Mugu NAWS; Pt Sur NF; San Francisco PWC; Skaggs Island NSGA; Stockton NCS; Treasure Island NS.

Installation/Office Name	NAVFACENGCOM, HQ
Office Title	Environmental Operations Division
POC Name	Steven C. Gonzales
Work Phone	(703) 325-0356
Fax Number	(703) 325-2156
Email Address	scgonzales@hq.navfac.navy.mil
Initiatives Name	Environmental Restoration Progress on the WEB
Initiatives Description	GIS used for BRAC Installations on the WEB. Tri-Service symbols and environmental data from in-house database are linked. Please see http://www.navy.mil/homepages/navfac/env

Installation/Office Name NAVFACENGCOM, Northern Division

Office Title

POC Name John S. Mayhew

Work Phone (610) 595-0567

Fax Number (610) 595-0555

Email Address

Initiatives Name

Initiatives Description Installation restoration project. To ensure environmental samples and analytical results are tied to specific locations on earth. To be able to view and query the database and post information to various overlays to make more informed decisions regarding current or future environmental risks and/or required actions. Also to use as a means for more effective communication between stakeholders including the general public.

Installation/Office Name NAVFACENGCOM, Northern Division

Office Title Environmental

POC Name: Emil Klawitter

Work Phone (610) 595-0567

Fax Number (610) 595-0555

Email Address eeklawitter@efdnorth.navfac.navy.mil

Initiatives Name

Initiatives Description GIS covered installation wide for Philadelphia Naval Complex.

Installation/Office Name NAVFACENGCOM, Pacific Division

Office Title

POC Name Joel Pai

Work Phone (808) 474-5323

Fax Number (808) 474-5870

Email Address jpai@efdpai.navy.mil

Initiatives Name kaho'lawe Island

Initiatives Description Provide cost model for 30-meter x 30-meter grid to clean up UXO. Contractor - Intergraph/Julian Salas.

Installation/Office Name	NAVFACENGCOM, Pacific Division
Office Title	Engineering Systems
POC Name	Wayne Abrigo
Work Phone	(808) 474-5324
Fax Number	(808) 471-5870
Email Address	wabrigo@efdpac.navy.mil
Initiatives Name	Maps
Initiatives Description	Available maps: Pearl Harbor Naval Station; Subase Pearl; Diego Garcia; Camp Smith; Barber's Point; Kaneohe MCAS; NAS Agana; NAS Barrigada; Yokosuka; Johnston Island; Midway; Akasaki, Japan; Foster Island; Iwakuni; Ford Island.

Installation/Office Name	NAVFACENGCOM, Southwest Division
Office Title	Environmental (Code 18)
POC Name	Christopher Kyburg
Work Phone	(619) 532-1998
Fax Number	(619) 532-3642
Email Address	cekyburg@efdswest.navfac.navy.mil
Initiatives Name	Navy Environmental Data Transfer Standard
Initiatives Description	Neutral file transfer standard with lists of valid values for contracting and transfer of environmental data.

Installation/Office Name	NAVFACENGCOM, Southwest Division
Office Title	Environmental
POC Name	Christopher Kyburg
Work Phone	(619) 532-1998
Fax Number	(619) 532-3642
Email Address	cekyburg@efdswest.navfac.navy.mil
Initiatives Name	
Initiatives Description	Initiative is to learn the software and interdiscipline communication, test TSSDS, and develop an active interest in GIS.

Installation/Office Name Pine Bluff Arsenal

Office Title

POC Name Charles Becker

Work Phone (501) 540-2834

Fax Number

Email Address

Initiatives Name

Initiatives Description GIS used for natural resources management.

Installation/Office Name U.S. Army Aberdeen Proving Ground

Office Title

POC Name Victoria L. Cwiernie

Work Phone (410) 278-6756

Fax Number

Email Address

Initiatives Name

Initiatives Description Establish environmental GIS to manage environmental data and provide better decision tools for project managers. The GIS will be the central collection point for all data and database links.

Installation/Office Name USAE District, Alaska

Office Title Engineering Branch

POC Name Catherine Holland

Work Phone (907) 753-2664

Fax Number (907) 753-5701

Email Address catherine.e.holland@usace.army.mil

Initiatives Name Formerly Used Defense Site Program (FUDS)

Initiatives Description Being developed for the FUDS Program in FY97. GIS is used for navigation in Civil Works. Formed a partnership with CERRL to develop GIS projects.

Installation/Office Name	USAE District, Chicago
Office Title	
POC Name	Mary Martin
Work Phone	(312) 353-6400
Fax Number	(312) 886-2891
Email Address	mary.martin@smtp.ncd.usace.army.m
Initiatives Name	EIS
Initiatives Description	EIS use with GIS. Primary use of GRASS.

Installation/Office Name	USAE District, Detroit
Office Title	Engineering: Hydrology
POC Name	Roger Gauthier
Work Phone	(313) 226-3054
Fax Number	(313) 226-2398
Email Address	gauthier@great_lakes.net
Initiatives Name	Contaminated Sediments.
Initiatives Description	Major Watersheds for Great Lakes Area. Trying to cut a CD with runtime base of Arc-View.

Installation/Office Name	USAE District, Huntington
Office Title	Engineering Division
POC Name	Jim Vassar
Work Phone	(304) 529-5208
Fax Number	(304) 529-5209
Email Address	jimv@mail.orh.usace.army.mil
Initiatives Name	
Initiatives Description	West Virginian Ordnance Works being done at Nashville District.

Installation/Office Name	USAE District, Huntsville
Office Title	
POC Name	Bill Craven
Work Phone	(205) 895-1612
Fax Number	
Email Address	
Initiatives Name	
Initiatives Description	GIS used for monitoring, operations and maintenance, and automation of tasks. Also has the potential to trim cleanup timeline.

Installation/Office Name	USAE District, Little Rock
Office Title	Engineering Division
POC Name	Steve Corley
Work Phone	(501) 324-5710
Fax Number	(501) 324-6908
Email Address	steve.c.corley@usace.army.mil
Initiatives Name	Civil Works Projects
Initiatives Description	Input all LAKE boundaries (Civil Works Projects) into microstation.

Installation/Office Name	USAE District, Little Rock
Office Title	Planning and Management
POC Name	Trish Anslow
Work Phone	(501) 324-5836
Fax Number	
Email Address	trish@enviro.swl.usace.army.mil
Initiatives Name	ARC
Initiatives Description	Wetlands database is in Informix and there's an initiative to use ARC information.

Installation/Office Name	USAE District, Louisville
Office Title	Survey and Mapping
POC Name	Boyd McClellan
Work Phone	(502) 582-5661
Fax Number	(502) 582-5108
Email Address	boyd.k.mcclellan@smtp.orl.usace.army
Initiatives Name	GIS Committee
Initiatives Description	GIS committee was established 1996. Contracted for GIS Implementation Plan on several pilot projects.

Installation/Office Name	USAE District, Memphis
Office Title	Planning Division
POC Name	Gloria Markovzci
Work Phone	(901) 544-3857
Fax Number	(901) 544-3955
Email Address	markovzcg@smtp.lmm.usace.army.mil
Initiatives Name	ARC-INFO
Initiatives Description	Summary report on Arc-Info vs. MGE recommended Arc-Info. GIS needs: (A.) Customer Needs; project maps, property maps, database information/ demographics, topographic maps, flood outline maps. (B.) Environmental Branch; Environmental applications: wetland and wildlife habitat analysis, wetland delineation (NWI maps, hydric soils), monitoring wetland restoration projects, delineation of dead or dying timber, project impact analysis, endangered species analysis (habitat, known sightings, nesting area sites, etc.), least tern survey, fat pocketbook pearly mussel (St. Francis Basin). Land and River Data; Databases/mapping, project feature layouts (spillway, dam, levee, (etc.) proposed site laid out over quad maps), contour mapping, tracking maps (private and/or government ownership of land), utilities overlay (gas or transmission lines, underground cable locations, etc.), flood lines (stage area curves), stream and river bottom profiles, sandbar location and size. HTRW Assessments; RCRA and CERCLIS Sites, HTRW producers, landfill locations (open and closed), illegal dump locations, LUST and UST locations. Cultural Resources; Areas surveyed or not surveyed, location of significant vs. nonsignificant vs. nothing found sites, historic vs. prehistoric sites (period if prehistoric), architectural sites, overlay ROW (construction vs. survey) of project area, electronic map library (reference or update). (C.) Economics Branch; Land use information (rural, urban, zoning), demographics, structures and contents, Other data from outside sources, flood outlines, real-time flood damage analysis. (D.) Plan Formulation Branch; project maps, land use maps, topographic maps, display/presentation materials, acreage/ database information, property maps, demographic information. (E.) Flood Plain Management; flood plain information for FEMA and others, CADD drawings for reports, project base maps, topographic maps, data from others.

Installation/Office Name	USAE District, New Orleans
Office Title	Design Service Branch
POC Name	James Flock
Work Phone	(504) 862-2565
Fax Number	(504) 862-1585
Email Address	james.flock@mail.usace.army.mil
Initiatives Name	REGIS
Initiatives Description	Hydro survey book; navigation charts; levee profiles; REGIS-River Environmental Geographic Information System.

Installation/Office Name	USAE District, Omaha
Office Title	Survey Section
POC Name	Jon Kragt
Work Phone	(402) 221-4614
Fax Number	(402) 221-4202
Email Address	jkragt@gismaster.mro.usace.army.mil
Initiatives Name	RAMS
Initiatives Description	RAMS linked with Arc-Info. Boating and Recreation maps with GIS.

Installation/Office Name	USAE District, Philadelphia
Office Title	
POC Name	Frank Schaeffer
Work Phone	(215) 656-6550
Fax Number	(215) 656-6543
Email Address	
Initiatives Name	
Initiatives Description	Flood studies; navigation projects; dredge disposal; regulatory

Installation/Office Name USAE District, Rock Island

Office Title

POC Name Thomas M. DeWitte

Work Phone (309) 794-6153

Fax Number

Email Address

Initiatives Name

Initiatives Description GIS used for environmental compliance at the Rock Island Arsenal and environmental restoration at Badger Army Ammunition Plant.

Installation/Office Name USAE District, Rock Island

Office Title Planning Section

POC Name Kevin Anderson

Work Phone (309) 794-5586

Fax Number (309) 794-5710

Email Address kevin.l.anderson@ncrmil.ncr.usace.army.mil

Initiatives Name Navigation Study

Initiatives Description Upper Mississippi River Illinois Waterway Navigation Study.

Installation/Office Name USAE District, Savannah

Office Title Spatial Engineering

POC Name Ricky Truluck

Work Phone (912) 652-5521

Fax Number (912) 652-5252

Email Address richard.l.truluck@sas02.usace.army.mil

Initiatives Name SOW

Initiatives Description SOW for all deliverables in electronic form. Customer dependent on hardware and software. Major milestone is Fort McPherson, Fort Gilliam, Fort Bragg and Fort Benning.

Installation/Office Name	USAE District, Seattle
Office Title	
POC Name	Lori Danielson
Work Phone	(206) 764-6084
Fax Number	(206) 764-6816
Email Address	lori.d.danielson@internet.nps.usace.army
Initiatives Name	EIS
Initiatives Description	Environmental Impact Statements wildlife/wetland mitigation studies master plan.

Installation/Office Name	USAE District, St. Louis
Office Title	Survey
POC Name	Paul Clouse
Work Phone	(314) 331-8390
Fax Number	(314) 331-8346
Email Address	paul.clouse@usace.army.mil
Initiatives Name	REGIS
Initiatives Description	REGIS-River Engineering and Environmental GIS (www.lmv.usace.army.mil/homepage/reegis/reegis.htm)

Installation/Office Name	USAE District, Wilmington
Office Title	Cost Engineering
POC Name	Paul Mason
Work Phone	(910) 251-4789
Fax Number	(910) 251-4965
Email Address	paul.j.mason@usace.army.mil
Initiatives Name	Dredge Management Plan
Initiatives Description	Dredge material maintenance management plan currently not funded but is being endorsed.

Installation/Office Name	USAE District, Wilmington
Office Title:	Environmental/CADD Coordinator
POC Name	Doug Wall
Work Phone	(910) 251-4440
Fax Number	(910) 251-4002
Email Address	doug.wall@usace.army.mil
Initiatives Name	Reservoir Projects
Initiatives Description	Mostly Civil Works Reservoir Projects. Lakes in NC. Some Lakes in VA.

Installation/Office Name	USAE Division, Huntsville
Office Title	Support Center
POC Name	Tony Hunt
Work Phone	(205) 895-1615
Fax Number	(205) 895-1602
Email Address	huntt@smtp.hnd.usace.army.mil
Initiatives Name	Fact Sheets
Initiatives Description	Amaknak, Alaska; Southwest Proving Ground, Arkansas; Baywood Park Training Area, California; Camp Elliot, California; Camp Simms, Washington D.C.; Ft. Pierce NATC, Florida; Illinois Ordnance Plant; Camp Grant Rifle Range, Illinois; Jefferson Proving Ground, Indiana; Camp Claiborne, Louisiana; Ft. Meade, Maryland; Assateague Island, Maryland; Nebraska Ordnance Works; Duck Target Facility, N. Carolina; Umatilla Depot, Oregon; Culebra Island NWR, Puerto Rico; Motlow Range, Tennessee; Nansemond Ordnance Plant (Tidewater), Virginia; Assateague Island, Virginia.

Installation/Office Name	USAE Waterways Experiment Station
Office Title	Tri-Service CADD/GIS Technology Center
POC Name	Bobby Carpenter
Work Phone	(601) 634-4572
Fax Number	(601) 634-4584
Email Address	carpenb@ex1.wes.army.mil
Initiatives Name	Tri-Service Spatial Data Standards
Initiatives Description	Develop GIS and spatial data standards for use in environmental restoration/compliance activities.

Page 17 of 18

Wednesday, October 09, 1996

Installation/Office Name	Vandenburg AFB
Office Title	Environmental Branch
POC Name	Karl Kneeling
Work Phone	(805) 734-8232
Fax Number	(805) 734-1339
Email Address	
Initiatives Name	
Initiatives Description	Base comprehensive plan will have all IRP sites mapped and integrated with IRPIMS.

Appendix E

Use of CADD/GIS Technology in Accomplishing ER/EC Activities

Use of CADD/GIS Technology in Accomplishing Environmental Restoration/Compliance Activities (Continued)										
Installation Name	Office Title	CADD Used in Office?	CADD Used by Contractor?	Years of CADD Usage*	GIS Used in Office?	GIS Used by Contractor?	GIS Accessory Software Used?	Years of GIS Usage*	DBMS Software Used?	Database Schema Available?
Air Force Headquarters Europe		No	No		Yes	No	No		No	No
Avon Park Air Force Range		No	No		Yes	Yes	No	C	Yes	No
Crane Naval Weapons Support Center		Yes	No	B	Yes	Yes	No	B	Yes	No
Edwards AFB		Yes	No	C	Yes	No	No	C	Yes	No
Fort Bliss	Environment	No	No		Yes	Yes	No		Yes	No
Fort Chaffee		No	No		Yes	No	No	A	No	No
Fort Drum		No	No		Yes	Yes	No		Yes	No
Fort Lewis		No	No		Yes	No	No		Yes	No
Hickam AFB		No	No		Yes	No	No		No	No
Hill AFB	Environmental Branch	Yes	No	B	Yes	No	No	B	Yes	Yes
HQ Air Force Center for Environmental Excellence	Consultant Operations Division	No	Yes	B	No	Yes	Yes	B	Yes	Yes
HQ Air Force Center for Environmental Excellence	Environmental Planning Division	Yes	No	A	No	Yes		No	Yes	No
HQ Air Force Center for Environmental Excellence	Pollution Prevention Directorate	No	No	D	No	No	No	D	Yes	No
* A = 1 - 2 Years; B = 2 - 5 Years; C = More than 5 Years; D = None, and will probably not be used in near future; E = None, but will possibly be used in near future; F = None, but will definitely be used in near future.										
(Sheet 1 of 7)										

* A = 1 - 2 Years; B = 2 - 5 Years; C = More than 5 Years; D = None, and will probably not be used in near future; E = None, but will possibly be used in near future; F = None, but will definitely be used in near future.

(Sheet 1 of 7)

Use of CADD/GIS Technology in Accomplishing Environmental Restoration/Compliance Activities (Continued)										
Installation Name	Office Title	CADD Used in Office?	CADD Used by Contractor?	Years of CADD Usage*	GIS Used in Office?	GIS Used by Contractor?	GIS Accessory Software Used?	Years of GIS Usage	DBMS Software Used?	Database Schema Available?
Intergraph Services Company		Yes	No	B	Yes	No	No	B	Yes	No
Lakehurst Naval Air Station		Yes	Yes		Yes	No	No	B	Yes	No
Manchester Fuel Department		No	No		No	No	No		No	No
Marine Corps Air Ground Combat Center	GIS/Remote Sensing Lab	Yes	No	A	Yes	No	No	A	No	No
McClellan AFB		Yes	No	B	Yes	No	No	B	Yes	No
Naval Air Engineering Station	Environmental	Yes	No	A	Yes	No	No	A	Yes	No
Naval Air Station, Pensacola		No	No	E	No	No	No	E	Yes	No
NAVFAC EFA NWEST	Environmental Management Systems	No	No	E	No	No	No	E	No	Yes
NAVFACENG COM HQ	Environmental Operations Branch	Yes	Yes	B	Yes	Yes	No	B	Yes	Yes
NAVFACENG COM, Atlantic Division		No	No	D	No	No	No	D	No	No
NAVFACENG COM, Atlantic Division	Environmental Quality Division	No	No		Yes	Yes	No		No	No

(Sheet 2 of 7)

(Sheet 2 of 7)

Use of CADD/GIS Technology in Accomplishing Environmental Restoration/Compliance Activities (Continued)										
Installation Name	Office Title	CADD Used in Office?	CADD Used by Contractor?	Years of CADD Usage*	GIS Used in Office?	GIS Used by Contractor?	GIS Accessory Software Used?	Years of GIS Usage	DBMS Software Used?	Database Schema Available?
NAVFACENG COM, Engineering Field Activity		No	Yes	A	No	Yes	Yes	A	Yes	Yes
NAVFACENG COM, Northern Division		No	No		No	Yes	No		No	NO
NAVFACENG COM, Environmental		Yes	No	A	Yes	No	Yes	A	Yes	No
NAVFACENG COM, Pacific Division		No	No	C	No	No	No		Yes	Yes
NAVFACENG COM, Pacific Division		Yes	Yes	A	Yes	Yes	No	A	Yes	Yes
NAVFACENG COM, Environmental		No	No		No	No	No		No	No
NAVFACENG COM, Southwest Division		Yes	No	B	Yes	Yes	No	B	Yes	No
Pine Bluff Arsenal		Yes	Yes	C	Yes	Yes	No	C	Yes	No
Scott AFB	Environmental Restoration	No	Yes		No	Yes	No		No	No
Tinker AFB	Environmental Branch	Yes	No		Yes	No	Yes		Yes	No
U.S. Army Aberdeen Proving Ground		Yes	No	A	Yes	No	No	A	Yes	No

Use of CADD/GIS Technology in Accomplishing Environmental Restoration/Compliance Activities (Continued)										
Installation Name	Office Title	CADD Used in Office?	CADD Used by Contractor?	Years of CADD Usage*	GIS Used in Office?	GIS Used by Contractor?	GIS Accessory Software Used?	Years of GIS Usage	DBMS Software Used?	Database Schema Available?
USAE Construction Engineering Laboratory/Center	Planning & Management Laboratory/Env.	No	No		No	No	No		No	No
USAE District, Savannah	Spatial Engineering	No	No	A	No	Yes	No	A	Yes	Yes
USAE District, Alaska	Engineering Branch	No	No	F	Yes	No	No	F	Yes	No
USAE District, Baltimore	Civil & HTRW Section	Yes	Yes	C	No	No	No	F	No	No
USAE District, Baltimore	Planning	No	No	D	No	No	No	D	No	No
USAE District, Baltimore	Project Management	No	No		No	No	No	E	No	No
USAE District, Baltimore	Remedial, Investigation, & Design (RID)	Yes	Yes		No	No	No	F	No	No
USAE District, Chicago		No	No	A	No	No	No	A	Yes	No
USAE District, Detroit	Engineering: Hydrology	Yes	No	B	Yes	No	No	B	No	No
USAE District, Fort Worth	Environmental Design Branch	Yes	No	C	Yes	No	Yes	B	Yes	Yes
USAE District, Huntington	Engineering Division	No	No	F	No	No	No	F	Yes	No
USAE District, Huntsville		Yes	No	A	Yes	Yes	No	A	Yes	No
USAE District, Kansas City	Engineering: Environmental Branch	Yes	No	C	Yes	No	Yes	A	Yes	Yes

(Sheet 4 of 7)

(Sheet 4 of 7)

Use of CADD/GIS Technology in Accomplishing Environmental Restoration/Compliance Activities (Continued)										
Installation Name	Office Title	CADD Used in Office?	CADD Used by Contractor?	Years of CADD Usage*	GIS Used in Office?	GIS Used by Contractor?	GIS Accessory Software Used?	Years of GIS Usage	DBMS Software Used?	Database Schema Available?
USAE District, Little Rock	Engineering Division	Yes	No	A	Yes	No	Yes	A	No	No
USAE District, Little Rock	Engineering Division	Yes	No	C	No	No	No		No	No
USAE District, Little Rock	Geotechnical Branch	Yes	No		Yes	No	No		No	No
USAE District, Little Rock	Planning & Management	No	No	A	No	No	No	A	Yes	No
USAE District, Louisville	Survey & Mapping	Yes	No	A	Yes	No	No	A	No	No
USAE District, Memphis	Planning Division	No	No	F	No	Yes	No	F	No	No
USAE District, Mobile	GIS, Survey, & Photogrammetry Section	No	Yes	A	Yes	Yes	No	A	Yes	No
USAE District, Mobile	Hazardous & Environmental Support	No	No		No	No	No		No	No
USAE District, New Orleans	Design Service Branch	Yes	No		Yes	No	No		No	No
USAE District, Omaha	Geoenvironmental Branch	Yes	No	B	No	No	No	E	Yes	Yes
USAE District, Omaha	Survey Section	Yes	No	C	Yes	No	No	C	Yes	No
USAE District, Philadelphia		Yes	No	B	Yes	No	No	B	No	No
USAE District, Pittsburgh	Geotechnical Branch	Yes	No	D	No	No	No	D	No	No
USAE District, Portland	Project Management	No	Yes		No	No	No		No	No

(Sheet 5 of 7)

(Sheet 5 of 7)

Use of CADD/GIS Technology in Accomplishing Environmental Restoration/Compliance Activities (Continued)										
Installation Name	Office Title	CADD Used in Office?	CADD Used by Contractor?	Years of CADD Usage*	GIS Used in Office?	GIS Used by Contractor?	GIS Accessory Software Used?	Years of GIS Usage	DBMS Software Used?	Database Schema Available?
USAE District, Rock Island		Yes	No		Yes	No	No		Yes	No
USAE District, Rock Island	Planning	Yes	No	B	Yes	No	No	B	No	No
USAE District, Sacramento	CADD	Yes	No	C	No	Yes	No	F	No	No
USAE District, Sacramento	Environmental Engineering Branch	Yes	Yes	C	No	Yes	No		No	No
USAE District, Sacramento	Environmental Engineering Section	Yes	No		No	No	No		No	No
USAE District, Sacramento	Geology	No	No		No	No	No		No	No
USAE District, Seattle		No	No		No	No	No		Yes	Yes
USAE District, Seattle	Geotechnical & Environmental Restoration	Yes	No	C	Yes	No	No	A	Yes	No
USAE District, St. Louis	Survey	Yes	No	B	No	Yes	No	B	Yes	No
USAE District, Vicksburg	Design Branch/Civil Engineering	Yes	No	C	Yes	No	Yes	C	Yes	Yes

(Sheet 6 of 7)

(Sheet 6 of 7)

Use of CADD/GIS Technology in Accomplishing Environmental Restoration/Compliance Activities (Continued)										
Installation Name	Office Title	CADD Used in Office?	CADD Used by Contractor?	Years of CADD Usage*	GIS Used in Office?	GIS Used by Contractor?	GIS Accessory Software Used?	Years of GIS Usage	DBMS Software Used?	Database Schema Available?
USAE District, Vicksburg	Geotechnical	No	No		No	No	No		No	No
USAE District, Walla Walla	Environmental Engineering Branch	Yes	Yes	A	No	No	No		Yes	Yes
USAE District, Wilmington	Cost Engineering	Yes	No	A	Yes	No	No	A	No	No
USAE District, Wilmington	Environmental	Yes	No	F	No	No	No	F	No	Yes
USAE Division, Huntsville	Support Center	Yes	No	A	Yes	No	Yes	A	Yes	Yes
USAE Waterways Experiment Station	Engineering Geology	Yes	Yes	C	Yes	Yes	No	C	Yes	No
USAE Waterways Experiment Station	Hydraulics Laboratory	Yes	No	C	Yes	No	Yes	C	Yes	No
USAE Waterways Experiment Station	Tri-Service CADD/GIS Technology	Yes	Yes	C	Yes	Yes	Yes	B	Yes	Yes
USAE Waterways Experiment Station	Water Quality & Contaminant Modeling	Yes	No	C	Yes	No	No	C	No	No
Vandenberg AFB	Environmental Branch	Yes	No		Yes	No	Yes		Yes	Yes

(Sheet 7 of 7)

(Sheet 7 of 7)

Appendix F

Available Electronic Information and Data

Available Digital Aerial Photography				
Installation/Office Name	Office Title	Digital Aerial Photography Available?	States In Which Located	Aerial Photography R = Restricted Availability Official Use Only U = Unrestricted
Hill AFB	Environmental Branch	Yes	UT	U
Naval Air Engineering Station	Environmental	Yes	NJ	O
Tinker AFB	Environmental Branch	Yes	OK	U
USAE District, Kansas City	Engineering: Environmental Branch	Yes		O
USAE District, Little Rock	Geotechnical Branch	Yes	AR	O
USAE District, New Orleans	Design Service Branch	Yes	LA	U
USAE District, Vicksburg	Design Branch/Civil Engineering Section	Yes	AR, LA, MS	U
Vandenberg AFB	Environmental Branch	Yes	CA	U

Available Air Quality Data				
Installation/Office Name	Office Title	Digital Air Quality Data Available?	States In Which Located	Air Quality Data Availability R = Restricted; O = Official Use Only; U = Unrestricted
Hill AFB	Environmental Branch	Yes	UT	U
Naval Air Engineering Station	Environmental	Yes	NJ	O
Tinker AFB	Environmental Branch	Yes	OK	U
Vandenberg AFB	Environmental Branch	Yes	CA	U

Available Cadastral Data					
Installation/Office Name	Office Title	Digital Cadastral/Real Estate Data Available?	States In Which Located	Cadastral/Real Estate Data Availability R = Restricted O = Official Use Only U = Unrestricted	
Hill AFB	Environmental Branch	Yes	UT	U	
NAVFACENGCOM, Northern Division	Environmental	Yes	PA, NJ, NY, NH	U	
Tinker AFB	Environmental Branch	Yes	OK	U	
USAE District, Fort Worth	Environmental Design Branch	Yes	TX, NM	O	
USAE District, Kansas City	Engineering: Environmental Branch	Yes	MO	O	
USAE District, Little Rock	Geotechnical Branch	Yes	AR	O	
USAE District, New Orleans	Design Service Branch	Yes	LA	U	
USAE District, Vicksburg	Design Branch/Civil Engineering Section	Yes	AR, LA, MS	U	
Vandenberg AFB	Environmental Branch	Yes	CA	U	

Digital CADD Drawings Available				
Installation/Office Name	Office Title	Digital CADD Drawings Available?	States In Which Located	Digital CADD Drawings Availability R = Restricted; CADD Drawings O = Official Use Only; U = Unrestricted
NAVFACENGCOM, Northern	Environmental Division	Yes	PA, NJ, NY, NH, PA	U
USAE District, Fort Worth	Environmental Design Branch	Yes	TX, LA, NM	O
USAE District, Kansas City	Engineering: Environmental Branch	Yes		O
USAE District, Little Rock	Geotechnical Branch	Yes	AR	O
USAE District, Vicksburg	Design Branch/Civil Engineering Section	Yes	AR, LA, MS	U
USAE District, Wilmington	Cost Engineering	Yes	NC, VA	U
USAE Waterways Experiment	Engineering Geology Station	Yes		O
Vandenberg AFB	Environmental Branch	Yes	CA	U

Available Geological Data				
Installation/Office Name	Office Title	Digital Geological Data Available?	States In Which Located	Geological Data Availability R = Restricted; O = Official Use Only; U = Unrestricted
HQ Air Force Center for Environmental Excellence	Consultant Operations Division	Yes	Various AF Installations.	R
Marine Corps Air Ground Combat Center	GIS/Remote Sensing Lab	Yes	CA	U
USAE District, Fort Worth	Environmental Design Branch	Yes	TX, LA, NM	O
USAE District, Kansas City	Engineering: Environmental Branch	Yes		O
USAE District, Little Rock	Geotechnical Branch	Yes	AR	O
USAE District, Vicksburg	Geotechnical Branch	Yes	LA, MS, AR	R
USAE Waterways Experiment Station	Engineering Geology	Yes		O

Available GIS Data				
Installation/Office Name	Office Title	Digital GIS Maps Data Available?	States In Which Located	GIS Maps & Data Availability R = Restricted; O = Official Use Only; U = Unrestricted
Hill AFB	Environmental Branch	Yes	UT	U
Marine Corps Air Ground Combat Center	GIS/Remote Sensing Lab	Yes	CA	U
Naval Air Engineering Station	Environmental	Yes	NJ	O
Naval Air Station, Pensacola		Yes	FL	U
NAVFACENGCOM, Atlantic Division		Yes	VA	U
NAVFACENGCOM, Northern Division	Environmental	Yes	PA, NY, NY, NH, PA	U
Tinker AFB	Environmental Branch	Yes	OK	U
USAE District, Chicago		Yes	IL	U
USAE District, Huntington	Engineering Division	Yes	WV	U
USAE District, Kansas City	Engineering: Environmental Branch	Yes	KS or MO	O
USAE District, Little Rock	Geotechnical Branch	Yes	AR	O
USAE District, Little Rock	Planning & Management	Yes	PA, MO	U
USAE District, New Orleans	Design Service Branch	Yes	LA	U
USAE District, Omaha	Survey Section	Yes	NE, MO, SD	U
USAE District, Philadelphia		Yes	PA, NJ, DE	U
USAE District, Rock Island	Planning	Yes	IL	U
USAE District, Savannah	Spatial Engineering	Yes	GA	U
USAE District, St. Louis	Survey	Yes	MO	U
(Continued)				

Available GIS Data (Concluded)				
Installation/Office Name	Office Title	Digital GIS Maps Data Available?	States In Which Located	GIS Maps & Data Availability R = Restricted; O = Official Use Only; U = Unrestricted
USAE District, Vicksburg	Design Branch/Civil Engineering Section	Yes	AR, LA, MS	U
USAE District, Vicksburg	Geotechnical Branch	Yes	LA	R
USAE District, Wilmington	Cost Engineering	Yes	NC, VA	U
USAE District, Wilmington	Environmental	Yes	NC	U
USAE Division, Huntsville	Support Center	Yes	CA, SC	O
USAE Waterways Experiment Station	Engineering Geology	Yes		O
Vandenberg AFB	Environmental Branch	Yes	CA	U

Available Groundwater Quality Data				
Installation/Office Name	Office Title	Digital Groundwater Data Available?	States In Which Located	Groundwater Quality Data Availability R = Restricted; O = Official Use Only; U = Unrestricted
Hill AFB	Environmental Branch	Yes	UT	U
HQ Air Force Center for Environmental Excellence	Consultant Operations Division	Yes	Various AF Installations	R
NAVFAC EFA NWEEST	Environmental Management Systems	Yes	WA, AK	U
Tinker AFB	Environmental Branch	Yes	OK	U
USAE District, Fort Worth	Environmental Design Branch	Yes	TX, LA, NM	O
USAE District, Kansas City	Engineering: Environmental Branch	Yes		O
USAE District, Little Rock	Geotechnical Branch	Yes	AR	O
USAE Waterways Experiment Station	Engineering Geology	Yes		O
Vandenberg AFB	Environmental Branch	Yes	CA	U

Available Groundwater Hydrology Data				
Installation/Office Name	Office Title	Digital Groundwater Hydrology Data Available?	States in Which Located	Groundwater Hydrology Data Availability R = Restricted; O = Official Use Only; U = Unrestricted
Hill AFB	Environmental Branch	Yes	UT	U
HQ Air Force Center for Environmental Excellence	Consultant Operations Division	Yes	Various AF Installations.	R
USAE District, Fort Worth	Environmental Design Branch	Yes	TX, LA, NM	O
USAE District, Kansas City	Engineering: Environmental Branch	Yes		O
USAE District, Omaha	Survey Section	Yes	MO, SD	U
USAE District, Rock Island	Planning	Yes	IL	U
USAE District, St. Louis	Survey	Yes	MO	U
USAE District, Vicksburg	Geotechnical Branch	Yes	LA	R
USAE Waterways Experiment Station	Engineering Geology	Yes		O

Available Hydrographic Data				
Installation/Office Name	Office Title	Digital Hydrographic Data Available?	States In Which Located	Hydrographic Data Availability R = Restricted; O = Official Use Only; U = Unrestricted
Hill AFB	Environmental Branch	Yes	UT	U
Tinker AFB	Environmental Branch	Yes	OK	U
USAE District, Kansas City	Engineering: Environmental Branch	Yes		O
USAE District, Little Rock	Geotechnical Branch	Yes	AR	O
USAE District, Mobile	GIS, Survey, & Photogrammetry Section	Yes	AL, FL	U
USAE District, St. Louis	Survey	Yes	MO	U
USAE District, Vicksburg	Design Branch/Civil Engineering Section	Yes	AR, LA, MS	U
Vandenberg AFB	Environmental Branch	Yes	CA	U

Available Orthophotos				
Installation/Office Name	Office Title	Digital Orthophotos Available?	States In Which Located	Orthophotos Availability R = Restricted; O = Official Use Only; U = Unrestricted
Hill AFB	Environmental Branch	Yes	UT	U
Naval Air Engineering Station	Environmental	Yes	NJ	O
NAVFACENGCOM, Northern Division	Environmental	Yes	PA	U
Tinker AFB	Environmental Branch	Yes	OK	U
USAE District, Chicago		Yes	IL	U
USAE District, Kansas City	Engineering: Environmental Branch	Yes		O
USAE District, Mobile	GIS, Survey, & Photogrammetry Section	Yes	AL, FL	U
USAE District, Omaha	Survey Section	Yes	NE, MO, SD	U
USAE District, Savannah	Spatial Engineering	Yes	GA	U
USAE District, Seattle		Yes	WA	U
USAE District, Vicksburg	Design Branch/Civil Engineering Section	Yes	AR, LA, MS	U
Vandenberg AFB	Environmental Branch	Yes	CA	U

Available Other Digital Data				
Installation/Office Name (10)	Office Title (11)	Other Digital Data Available?	Type of Data-States In Which Located	Other Data Availability R = Restricted; O = Official Use Only; U = Unrestricted
HQ Air Force Center for Environmental Excellence	Pollution Prevention Directorate	Yes	Guidance documents for Pollution Prevention Programs - AF Wide; Statements of Work for Environmental Contracts - AF Wide	O
USAE District, Detroit	Engineering: Hydrology	Yes	MI	U
USAE District, Little Rock	Planning & Management	Yes	Shoreline Management-AR, MO	U
USAE District, Walla Walla	Environmental Engineering Branch	Yes	Lessons Learned - WA, OR, ID	O

Available Regulatory Criteria				
Installation/Office Name	Office Title	Digital Regulatory Criteria Data Available?	States In Which Located	Regulatory Criteria Availability R = Restricted; O = Official Use Only; U = Unrestricted
USAE District, Fort Worth	Environmental Design Branch	Yes	TX, LA, NM	O
USAE District, Philadelphia		Yes	PA, NJ, DE	U
USAE District, Walla Walla	Environmental Engineering Branch	Yes	WA, OR, ID	U

Available Risk Assessment Data				
Installation/Office Name	Office Title	Digital Risk Assessment Data Available?	States In Which Located	Risk Assessment Data Availability R = Restricted; O = Official Use Only; U = Unrestricted
Hill AFB	Environmental Branch	Yes	UT	U
HQ Air Force Center for Environmental Excellence	Consultant Operations Division	Yes	Various AF Installations.	R
Naval Air Engineering Station	Environmental	Yes	NJ	O
USAE District, Fort Worth	Environmental Design Branch	Yes	TX, LA, NM	O
USAE District, Kansas City	Engineering: Environmental Branch	Yes		O

Available Sediment Quality Data					
Installation/Office Name	Office Title	Digital Sediment Quality Data Available?	States In Which Located	Sediment Quality Data Availability R = Restricted; O = Official Use Only; U = Unrestricted	
Hill AFB	Environmental Branch	Yes	UT	U	
HQ Air Force Center for Environmental Excellence	Consultant Operations Division	Yes	Various AF Installations	R	
Naval Air Engineering Station	Environmental	Yes	NJ	O	
Tinker AFB	Environmental Branch	Yes	OK	U	
USAE District, Fort Worth	Environmental Design Branch	Yes	TX, LA, NM	O	
USAE District, New Orleans	Design Service Branch	Yes	LA	U	
Vandenberg AFB	Environmental Branch	Yes	CA	U	

Available Soil Quality Data				
Installation/Office Name	Office Title	Digital Soil Quality Data Available?	States In Which Located	Soil Quality Data Availability R = Restricted; O = Official Use Only; U = Unrestricted
Hill AFB	Environmental Branch	Yes	UT	U
HQ Air Force Center for Environmental Excellence	Consultant Operations Division	Yes	Various AF Installations.	R
Naval Air Engineering Station	Environmental	Yes	NJ	O
Tinker AFB	Environmental Branch	Yes	OK	U
USAE District, Fort Worth	Environmental Design Branch	Yes	TX, LA, NM	O
USAE District, Little Rock	Geotechnical Branch	Yes	AR	O
USAE District, New Orleans	Design Service Branch	Yes	LA	U
USAE Waterways Experiment Station	Engineering Geology	Yes		O
Vandenberg AFB	Environmental Branch	Yes	CA	U

Available Remedial Design/Action Specifications					
Installation/Office Name	Office Title	Digital RD/RA Specifications Available?	States In Which Located	RD/RA Specifications Availability R = Restricted; O = Official Use Only; U = Unrestricted	
Hill AFB	Environmental Branch	Yes	UT	U	
HQ Air Force Center for Environmental Excellence	Consultant Operations Division	Yes	Various AF Installations.	R	
USAE District, Fort Worth	Environmental Design Branch	Yes	TX, LA, NM	O	
USAE District, Kansas City	Engineering: Environmental Branch	Yes		O	

Available Surface Water Quality Data				
Installation/Office Name	Office Title	Digital Surface Water Quality Data Available?	States In Which Located	Surface Water Quality Data Availability R = Restricted; O = Official Use Only; U = Unrestricted
Hill AFB	Environmental Branch	Yes	UT	U
HQ Air Force Center for Environmental Excellence	Consultant Operations Division	Yes	Various AF Installations	R
Tinker AFB	Environmental Branch	Yes	OK	U
USAE District, Fort Worth	Environmental Design Branch	Yes	TX, LA, NM	O
Vandenberg AFB	Environmental Branch	Yes	CA	U

Available Wetlands Data				
Installation/Office Name	Office Title	Digital Wetlands Data Available?	States In Which Located	Wetlands Data Availability R = Restricted; O = Official Use Only; U = Unrestricted
Hill AFB	Environmental Branch	Yes	UT	U
NAVFACENGCOM, Atlantic Division		Yes	VA	U
USAE District, Chicago		Yes	IL	U
USAE District, Little Rock	Planning & Management	Yes	PA, MO	U
USAE District, Rock Island	Planning	Yes	IL	U
USAE District, Vicksburg	Design Branch/Civil Engineering Section	Yes	AR, LA, MS	U
USAE District, Wilmington	Cost Engineering	Yes	NC, VA	U
Vandenberg AFB	Environmental Branch	Yes	CA	U

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE September 1997		3. REPORT TYPE AND DATES COVERED Final report	
4. TITLE AND SUBTITLE A Survey of Tri-Service Environmental Restoration and Compliance Initiatives Using Computer-Aided Design and Drafting (See reverse)				5. FUNDING NUMBERS	
6. AUTHOR(S) Bobby G. Carpenter, Steven C. Gonzales, Brian Shin Tri-Service CADD/GIS Technology Center Environmental Field Working Group					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Engineer Waterways Experiment Station 3909 Halls Ferry Road Vicksburg, MS 39180-6199 (See reverse)				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Engineer Waterways Experiment Station 3909 Halls Ferry Road Vicksburg, MS 39180-6199				10. SPONSORING/MONITORING AGENCY REPORT NUMBER Technical Report CADD-97-1	
11. SUPPLEMENTARY NOTES Available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161					
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.				12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) This report summarizes the findings of an effort accomplished by the Tri-Service CADD/GIS Technology Center's (Tri-Service Center's) Environmental Field Working Group (FWG) during fiscal year 1996 (FY96) to identify and review Environmental Restoration (ER) and Environmental Compliance (EC) initiatives using Computer-Aided Design and Drafting (CADD) and/or Geographic Information System (GIS) technology. The purpose of this effort was two-fold: (1) Minimize the duplication of effort, encourage communication, and facilitate the transfer of available information and knowledge concerning ER and EC activities between the various Department of Defense (DoD) organizations; and (2) Determine the extent that CADD, GIS, and other computerized technologies are used for accomplishing ER and EC activities, determine training needs, and determine methods for facilitating greater usage of this technology in the future.					
14. SUBJECT TERMS CADD Environmental compliance DoD Environmental restoration Environmental GIS				15. NUMBER OF PAGES 126	
				16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED		18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED		19. SECURITY CLASSIFICATION OF ABSTRACT	
20. LIMITATION OF ABSTRACT					

4. (Concluded).

CADD)/Geographic Information System (GIS) Technology

7. (Concluded).

NAVFACENG COM HQ
200 Stovall Street
Code 42, Environmental
Alexandria, VA 22332-2300